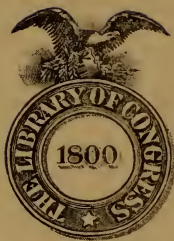


^P
213

B₃



Class P213

Book B3

GRAMMATOGRAPHY

A

MANUAL OF REFERENCE

TO THE

ALPHABETS OF ANCIENT AND MODERN
LANGUAGES .

BASED ON THE GERMAN COMPILATION

OF

F. BALLHORN.



LONDON

TRÜBNER AND CO., 60, PATERNOSTER ROW.

1861.

p213
B3

21

PREFACE.

THE GRAMMATOGRAPHY is offered to the Public as a compendious introduction to the reading of the most important ancient and modern languages. Simple in its design, it will be consulted with advantage by the Philological Student, the Anfateur Linguist, the Bookseller, the Corrector of the Press, and the diligent Compositor.

Although substantially based on "Ballhorn's Alphabete," a German compilation, which, in the space of a few years, passed through nine editions, the present manual has in several articles been very considerably improved and enlarged. Of the new observations which have been inserted, some may prove useful even when this work shall be consulted by the side of the respective Grammars. With regard to the Asiatic Alphabets, it may be stated, that the continued efforts to obtain trustworthy specimens have, in some instances, led to highly satisfactory results. In preparing the type of the Chinese characters, the lateral "Tones" have been adjoined to the 214 symbols of pronunciation. These additions will enable the student, instructed by native teachers, to remember with greater facility the varying articulation of vowel-sounds.



























The publishers entertain the hope, that the present work, an humble attempt to assist in the furtherance of philological pursuits, will obtain the encouraging consideration of competent scholars, whose suggestions, available for future editions, are respectfully solicited.

ALPHABETICAL INDEX.















































	Page		Page
Afghan (or Pushto)	28	Hebrew (Judæo-German)	13
Amharic	23, 24, 25	Hebrew (Current hand)	14
Anglo-Saxon	73	Hungarian	68
Arabic	20, 21	Illyrian	63
Arabic Ligatures	21, 22	Irish	73
Aramæic	9	Italian (Old-)	9
Archaic Characters	8, 9	Japanese	34
Armenian	53	Javanese	46, 47, 48
Assyrian Cuneiform	7	Lettish	69
Bengali	45	Mantshu	50, 51
Bohemian (Czechian)	67, 68	Median Cuneiform	6
Búgís	45	Modern Greek (or Romaic)	57
Burmese	41	Mongolian	52
Canarese (or Carnâtaca)	42	Numidian	8
Chinese	30, 31, 32, 33	Old-Slavonic (or Cyrillic)	58
Coptic	29	Palmyrenian	9
Croat-Glagolitic	60	Persian	27
Cufic	9	Persian Cuneiform	5
Cyrillic (or Old Slavonic)	58	Phœnician	8
Czechian (or Bohemian)	67, 68	Polish	65
Danish	71	Pushto (or Afghan)	28
Demotic	8	Romaic (or Modern Greek)	57
Estrangelo	9	Russian	61, 62
Ethiopic	23, 24, 25	Runes	75, 76
Etruscan	9	Samaritan	15
Georgian	54	Sanscrit	35, 36, 37, 38
German	70	Servian	63
Glagolitic	59	Slavonic (Old-)	58
Gothic	74	Sorbian (or Wendish)	66
Greek	55	Swedish	72
Greek Ligatures	56	Syriac	16, 17, 18, 19
Greek (Archaic)	9	Tamil	39, 40
Gujerati (or Guzerattee)	43	Telugu	44
Hieratic	8	Tibetan	49
Hieroglyphics	8	Turkish	26
Hebrew	10, 11, 12	Wallachian	64
Hebrew (Archaic)	8	Wendish (or Sorbian)	66
Hebrew (Rabbinical)	13	Zend	41

PERSIAN CUNEIFORM CHARACTERS.





















































































There are two main families of Cuneiform Characters which, before the expedition of Alexander the Great, were in use nearly in all Asiatic Countries, subjected to the (Achaemenides) Persian Kings. One of these, the Arian arrow-headed, is here given, and is a pure alphabet of fixed characters, which was made use of by the old Persians, proper, and is now read with tolerable accuracy. The other, however, not yet deciphered with sufficient certainty, was employed, with some modifications, by at least five different nations, the Babylonians, the Assyrians, the Medo-Scythians (the second in the triglot inscriptions of Persepolis and Bisutun), the Susians and the Armenians. Almost in each of these five sorts of characters can be distinguished three styles, the Archaic, the Lapidary, and the Cursive.

Form	Value	Form	Value	Form	Value	Form	Value
	a		t		m before i		s (sh)
	i		t' before i		m' before u		z
	u		t' before u		n		z', g'
	k		th		y		h
	q		d		r		thr (tr)
	kh		dh		r'		rp, q
	g		p		f		d, h
	gh		f		v		b, u, m, i
	k'		b		ç (s)		point for separating words.
	g'		m				

MEDIAN CUNEIFORM CHARACTERS

Form	Value	Form	Value	Form	Value	Form	Value
	a		t		phi		vo
	â		ta		y		s
	i		ti		yu		sa
	î		tu		yo		su
	u		th		r		s'
	û		thi		ra		s'a
	q		thu		ri		s'i
	qu		p		ru		z
	k		pa		ro		za
	ka		pi		lu		h
	ku		pe		fi		ha
	kh		pu		fe		n
	kha		ph		v		ni
	khu		pha		vu		m

ASSYRIAN CUNEIFORM CHARACTERS

Form	Value	Form	Value	Form	Value	Form	Value
	a		ch		n		r
							
	a, ya		t		p		r
							
	b		t, s		ds, z, dsh or j		r
							
	g, kh		t, s		ds, z, dsh or j		s
							
	d		i		k		sh
							
	h		i, y		k		sh
							
	hu, v, y		i, ü		k		sh
							
	u		y		r		a, z
							
	o		kh		r		nue
							
	v, h, a, r		m, v		r		vush
							
	ch		n		r		vush

OLDEST CHARACTERS

Arrangement	Hieroglyphics	Hieratic	Demotic	Phœnician	Numidian	Early - Hebrew
א Alëph			...	𐤀 𐤁	...	א
ב Beth			𐤃	𐤂 𐤃	𐤄	ב ב
ג Gimel		...	...	𐤄 𐤅	...	ג ג
ד Däleth		𐤆	...	𐤆 𐤇	𐤈	ד ד
ה He			𐤉	𐤈 𐤉	𐤊	ה
ו Vāv		𐤋	...	𐤊 𐤋	...	ו
ז Zäyïn	𐤍	𐤌	...	𐤌	...	...
—	𐤎	𐤍	...	...	...	...
—	𐤏	𐤎	𐤏	...	...	...
ח Chëth	𐤐	𐤏	...	𐤐 𐤑	𐤒	ח
ט Tëth	𐤓	...	𐤓	𐤓	𐤔	...
י Yödth	𐤕	𐤔	𐤕	𐤕 𐤖	...	י י
כ Kâph	𐤗	𐤖	𐤗	𐤗 𐤘 𐤙	𐤚 𐤛	כ
ל Lāmëdh	𐤛	𐤙	𐤛	𐤛 𐤜 𐤝	𐤞	ל
מ Mëm	𐤟	𐤟	𐤟	𐤟 𐤠 𐤡	𐤢 𐤣	מ
נ Nün	𐤤	𐤢	...	𐤣 𐤤	𐤥	נ
ס Sāmëk	𐤦	𐤣	𐤦	𐤦 𐤧	𐤨	...
ע Ayïn	𐤨	𐤣	𐤨	𐤨 𐤩	𐤪	ע
פ Pë	𐤬	𐤣	𐤬	𐤬	𐤭	פ
צ Tsādhië	𐤮	...	...	𐤮 𐤯	...	צ
ק Q'ôph	𐤱	𐤣	𐤱	𐤱 𐤲	𐤳	ק פ
ר Rësh	𐤳	𐤣	𐤳	𐤳 𐤴	𐤵	ר
ש Shîn	𐤶	𐤣	𐤶	𐤶 𐤷 𐤸	...	ש ו
ת Tāv	𐤹	...	...	𐤹 𐤺	𐤻 𐤼	ת
ף	𐤽	𐤣	𐤽	...	...	...

OLDEST CHARACTERS

Aramaic	Estrangelo	Palmyrenian	Kufic	Old-Hellenic	Old-Italic	Etrurian
א א	𐤀	𐤁 𐤂 𐤃	ا	Α	Α 𐌀 𐌁	Α Α
ב	𐤄	𐤅	ب	Β Β	Β Β	Β Β } a
ג	𐤆	𐤇	ג	Γ Γ 𐌂	(𐌂)	Α Α } a
ד	𐤈	𐤉	ד	Δ Δ 𐌃	Δ 𐌃 Δ	Β Β b
ה	𐤊	𐤋	ה	Ε Ε	Ε 𐌄 Ε	Κ Κ 𐌅 } k, g
ו	𐤌	𐤍	ו	Ϝ ϝ	Ϝ ϝ Ϝ	𐌆 𐌆 } t, d
ז	𐤎	𐤏	ז	Ζ	𐌇 𐌇	𐌆 𐌆 } t, d
ח	𐤐	𐤑	ח	Η	Υ	Ξ Ξ e
ט	𐤒	𐤓	ט	Θ	.....	8 f
י	𐤔	𐤕	י	Η	Θ Η	Η h
כ	𐤖	𐤗	כ	⊙	⊙ 𐌈	י i
ל	𐤙	𐤚	ל	𐌉 𐌉	𐌉 𐌉	𐌊 𐌊 𐌋 } l
מ	𐤛	𐤜	מ	κ κ	κ κ	𐌋 𐌋 } l
נ	𐤝	𐤞	נ	λ λ 𐌌	𐌌 𐌌	𐌌 𐌌 } m
ס	𐤟	𐤠	ס	μ μ	μ	𐌌 𐌌 } m
ע	𐤡	𐤢	ע	ν	𐌎 ν	𐌎 𐌎 } n
פ	𐤣	𐤤	פ	𐌏 𐌏	𐌏	𐌏 𐌏 } n
ק	𐤥	𐤦	ק	⊙	⊙ ⊙	⊙ ⊙ } o
ר	𐤨	𐤩	ר	𐌐	𐌐 𐌐	⊙ ⊙ } o
ש	𐤪	𐤫	ש	𐌑	𐌑	𐌑 𐌑 p, b
ת	𐤬	𐤭	ת	Ϟ ϟ	𐌒 𐌒 Δ	Δ Δ } r
י	𐤮	𐤯	י	𐌓 𐌓	Α Ρ	𐌒 𐌒 } r
כ	𐤰	𐤱	כ	μ μ	μ	Σ Σ Σ s
ל	𐤲	𐤳	ל	τ τ	τ τ	Υ u
מ	𐤴	𐤵	מ	υ υ	υ	υ υ, u

HEBREW

Form	Name	Pronun- ciation	Numer- value	NOTES.
א	Aleph	Spiritus lenis	1	<p>The Hebrew Alphabet, like all Semitic alphabets, consists only of consonants, 22 in number, some of which, however, have also the force of vowels. Hebrew is read from right to left. Because at the end of the lines, words cannot be divided, the following dilatable characters (<i>dilatables</i>) were employed to help to justify, or fill up the lines: but now the practice is all but obsolete.</p> <p>ם ת ל ה ה ז</p>
ב	Beth	b bh	2	
ג	Gimel	g gh	3	
ד	Daleth	d dh	4	
ה	He	h	5	
ו	Vav	w	6	
ז	Zayin	s soft	7	
ח	Cheth	ch	8	
ט	Teth	t	9	
י	Yodh	j	10	
כ, final י	Kaph	k kh	20	<p>CONSONANTS. <i>Notes on Pronunciation.</i></p> <p>ס is the softest guttural, an emission of the breath scarcely to be heard, the Spiritus lenis of the Greeks, similar to π, but much softer.</p> <p>ך before a vowel, is our aspirated h (the Spiritus asper of the Greeks): but after a vowel, at the end of a syllable, it is a guttural, and, at the end of words, it often supplies the place of a vowel.</p> <p>ע 1) is a guttural g, accompanied by a grating or rattling sound; 2) a softer breathing like s. In reading and transcribing hebrew words, it is now usual to omit ע and s, e. g. אֱלִי Eli.</p> <p>ך is the harshest guttural, like the German ch as pronounced by the Swiss, or the Spanish x and j.</p> <p>ך is pronounced in Hebrew more like a rattling guttural, than as a pure lingual, and partakes of both sounds.</p> <p>ש and ש were originally but one and the same letter, as they still are when written without points: but as in some words this letter had a softer sound, similar to s, this two-fold pronunciation is distinguished by the grammarians by the diacritical point: ש (sh) and ש (s).</p> <p>י is the English z.</p> <p>ז, כ, and ז are strongly articulated sounds, produced by a compression of the lower organs of the mouth: the two first, therefore, differ essentially from ט and ז which are equivalent to our t and k, and are often aspirated.</p>
ל, final ח	Lamedh	l	30	
מ, final ע	Mem	m	40	
נ, final י	Nun	n	50	
ס	Samek	s	60	
ע	Ayin	guttural	70	
פ, final ח	Pe	p ph	80	
צ, final י	Tsadhe	ss	90	
ק	Q'oph	q	100	
ר	Resh	r	200	
ש	Sin	s	300	
ש	Shin	sh	300	
ת	Tav	t th	400	
<p><i>Final- Kaph</i> with Shva י with Q'amets י with Daglesh and Q'amets י</p>				
<p>LIGATURES. י" or י" = י"י י" = י"א, also instead of י"א</p>				

Daghesh forte, doubling the consonants.

Daghesh lene, hardening the consonant; it stands only in the six *mutae*: מ פ ש ל נ ז ב in the above named cases; otherwise the point occurring in these consonants must be a *Daghesh forte*.

Mappiq, indicates that those consonants, which are also used as vowels, are then to be pronounced as consonants; in modern printing it is made use of only in the מ at the end of the words.

In opposition to the point hardening the consonant, a little stroke standing above the consonant indicates his softer sound. This stroke called

Raphe (ֿ) is now almost out of use, and is only employed in order to indicate expressly the absence of a *Daghesh* or *Mappiq*.

ACCENTS.

The general design of the accents is to indicate the rhythmical members of the verses in the Old Testament. In doing this, they perform a twofold duty; for the accents mark at one and the same time partly the logical relation of each word to the whole sentence, and partly the accented syllable of each single word. In the first case the accents supply the punctuation, in the latter they are signs of tone. — As *signs of tone*, the different accents are equivalent, because there is in Hebrew only one kind of accentuation. In most words, the last syllable is accented, more rarely the last but one. — As *signs of punctuation*, their use is more complicated, because they not only separate words, like our points, commas and colons, but also join one to the other. Therefore they are divided in *Distinctivi* and *Conjunctivi*. In the following list they are arranged not according to their grammatical value, but according to their being placed below the consonants or *above* them, in order to give a more facile view of them.

ACCENTS PLACED UNDER CONSONANTS.

Silluq only at the end of the verse, therefore always joined with : *Soph-pasuq*, which stands between the single verses.

- ^ *Athnach*, mostly in the midst of a verse
- < *Yethibh* (always to the left of the vowel).
- ^ *Tebhir*
- ^ *Tiphcha initiale*
- ^ *Merkha*
- ^ *Double-Merkha*
- ^ *Munach*
- < *Mahpakh* (to the right of the vowel)
- ^ *Darga*
- ^ *Yârach*
- ^ *Tiphcha finale*.

ACCENTS PLACED ABOVE CONSONANTS.

- ^ *Segholta*
- ^ *Zaqeph-qaton*
- ^ *Zaqeph-gadhol*
- ^ *Rebhia*
- ^ *Zarqa*
- ^ *Qadma*
- ^ *Pashta*
- ^ *Shalshelet*
- ^ *Paser*
- ^ *Qarne-phara*
- ^ *Great-Telisha*
- ^ *Little-Telisha*
- ^ *Gäresh*
- ^ *Double-Gäresh*.

ACCENTS CONSISTING OF TWO PARTS BELONGING TOGETHER, THE ONE ABOVE, AND THE OTHER BELOW CONSONANTS.

- ^ < *Merkha mahpakhatum*
- ^ < *Merkha sarqatum*
- ^ < *Mahpakh sarqatum*.

- : *Soph-pasuq*, separating verses.
- ! *Pesiq*, between the words.
- *Maqqeph*, hyphen, aloft, between the words.
- | *Metheg*, sign of tone (to the left of the vowel).

NUMERALS.

There are no numerical ciphers in Hebrew; but consonants are used instead of them. The units are expressed by א—י, the tens by י—י, 100—400 by ק—ד. The numbers 500—900 sometimes are expressed by the five final letters

י 500 ק 600 נ 700 ס 800 ע 900, sometimes by ד=400 with addition of the other hundreds, e. g. קד=500. In compound numbers, the greater is placed first, e. g. א 11, אק 121. The number 15 is written with יו (9+6), instead of יד, because the name of God יהוה begins with these letters; and for the same reason, 16 is written יז instead of יח. The thousands are expressed by the units, superscribing two points, e. g. ס 1000.

ABBREVIATIONS.

- ' A stroke aloft to the left of the consonant, e. g. 'ס, denotes that this consonant serves as a numeral. By the side of the last consonant of a word, e. g. 'ט (= טענה) it marks an abbreviation.
- " Two strokes above a word, e. g. "ס, indicate that each of these letters stands for a separate word abbreviated.
- ° or * in copies of the Hebrew Bible refer to the readings placed in the margin or at the foot of the page. The first is of Masoretic, and the other is of modern origin.

RABBINIC

Form	Name	Pronunciation
א	Aleph	Spiritus lenis
ב	Beth	bh b
ג	Gimel	gh g
ד	Daleth	dh d
ה	He	h
ו	Vav	w
ז	Zayin	s
ח	Cheth	ch guttural
ט	Teth	t
י	Yodh	y
כ, final ך	Kaph	ch k
ל	Lamedh	l
מ, final ם	Mem	m
נ, final ן	Nun	n
ס	Samek	s
ע	Ayin	guttural
פ, final ף	Pe	ph p
צ, final ץ	Tsadhe	z
ק	Q'oph	k
ר	Resh	r
ש	Shin Sin	sh s
ת	Tav	th t

GERMAN-RABBINIC

Form	Pronunciation
א	a
ב	b
בֿ	v f
ג	g
ד	d
ה	h
ו	v u o
וװ	w
ז	s
ח	cch
ט	t
י	i j e short
כ, final ך	e
כֿ	ch
ל	l
מ, final ם	m
נ, final ן	n
ס	s ss
ע	e long
פ, final ף	p
פֿ	ph pf v
צ, final ץ	z tz
ק	k ck q
ר	r
ש	s sh
ת	t
תֿ	tt

DIPHTHONGS.

אױ au, ײ ei, ױ eu, ױ ö ü german.

HEBREW RUNNING-HAND

Form		Name	Pronun- ciation	Numerical value	Ligatures
Polish	German				
		Aleph	a	1	
		Beth	b	2	= be
		Gimel	g	3	= bh
		Daleth	d	4	
		He	h	5	= ng
		Vav	w	6	= nd
		Zayin	s	7	= nh
		Cheth	ch	8	
		Teth	t	9	= nf
		Yodh	y	10	
		Kaph	ech	20	= un
		Lamedh	l	30	= nw
		Mem	m	40	= nj
		Nun	n	50	
		Samek	ss	60	= zd
		Ayin	e	70	= zw
		Pe	p	80	= zi
		Fe	f	90	
		Tsadhe	c or z	100	1 with mark of ab- breviation, in use at the end of certain words.
		Q'oph	k	200	
		Resh	r	300	
		Shin	sh	400	
		Tav	th	500	

FINAL LETTERS.

Polish.	German.
= cch	= ech
= m	= m
= n	= n
= f	& = f
= c z	& = c z

SAMARITAN

Form	Name	Pronunciation	Numerical value
Ⲁ	Aleph	Spīritus lenis	1
ⲁ	Beth	b bh	2
Ⲃ	Gimel	g gh	3
ⲃ	Daleth	d dh	4
Ⲅ	He	h Spir. asper	5
ⲅ	Vav	w v	6
Ⲇ	Zayin	s ds	7
ⲇ	Cheth	ch hh	8
Ⲉ	Teth	t	9
ⲉ	Yodh	y	10
Ⲋ	Kaph	k ch	20
ⲋ	Lamedh	l	30
Ⲍ	Mem	m	40
ⲍ	Nun	n	50
Ⲏ	Samek	s	60
ⲏ	Ayin	ʔ hebrew	70
Ⲑ	Pe	p ph	80
ⲑ	Tsadhe	ts	90
Ⲓ	Q'oph	k	100
ⲓ	Resh	r	200
Ⲕ	Shin	sh	300
ⲕ	Tav	t th	400

NOTES.

The Samaritan is a Semitic language. Therefore, the alphabet consists only of consonants (22 in number) and is read from right to left. As in this language words cannot be separated at the end of the lines, the two letters ending the last word are separated from the others and placed at the end of the line; but in printing this is generally avoided by diminishing or enlarging the spaces between the single words.

Save some points and scanty orthographical signs, there are in Samaritan no vowel-marks, accents or other diacritical signs as in Hebrew. Therefore we are somewhat in the dark about the pronunciation of the consonants and vowels and it can be acquired only by comparison with the Syriac and the Hebrew.

VOWELS.

There are no vowel-marks as in other Semitic languages. However, to supply this want and to indicate somewhat the pronunciation, some consonants are used as vowels, viz.:

ā Ⲁ, Ⲅ, ∇

ē Ⲁ, ⲉ

ī ⲉ

o, oo ⲅ

Of two consonants beginning a word, the first is pronounced as if it were a slight and indistinct vowel, similar to the Hebrew Shwa.

DIACRITICAL SIGNS.

The only diacritical sign is a stroke over the consonant (e. g. Ⲁ) serving to distinguish two different words written in the same manner, or two different forms derived from one and the same root, or to indicate some letter added or omitted. When placed over ⲉ or ⲅ, the stroke indicates that these letters are real consonants, not representing vowels.

PUNCTUATION.

A point is put by the side of the final letter of a word. Besides this, the following signs have been introduced by the transcribers:

⋅ or ⋆ or ⋆: at the end of a sentence.




.. (also ⋆) at the end of part of a sentence, like our colon.

⋆: or —⋆: more seldom —⋆: etc., or compound —⋆: =⋆: etc. at the end of a longer sentence or section.

<⋆: =⋆: > or similar signs, sometimes again and again repeated, between the end of one section, paragraph or chapter, and the beginning of the other.

The numbers are written as in Hebrew (see under).

SYRIAC

Name	Form				Pronun- ciation	Numer. value	VOWELS.																													
	uncon- nected	connect- ed with a preced- ing letter	connect- ed with both	connect- ed with a follow- ing letter			Figure		Name	Pronun- ciation.																										
	Syriac.	Greek.																																		
Olaph	ܐ	α	Spiritus lenis	1	<p>The Syriac is written from right to left. — The vowels are expressed by diacritical signs or some marks in imitation of the greek; the latter of which are now mostly in use. In former times both kinds were employed promiscuously.</p> <table><tr><th colspan="2">Figure</th><th rowspan="2">Name</th><th rowspan="2">Pronun- ciation.</th></tr><tr><th>Syriac.</th><th>Greek.</th></tr><tr><td>ܐ</td><td>α</td><td>Pethocho</td><td>ă</td></tr><tr><td>ܐ or ܐ</td><td>ι</td><td>Rebotzo</td><td>ě</td></tr><tr><td>ܐ</td><td>η</td><td>Chebotzo</td><td>ĩ</td></tr><tr><td>ܐ or ܐ</td><td>ο</td><td>Zekopho</td><td>o</td></tr><tr><td>ܐ ܐ ܐ</td><td>ο ̣</td><td>Etsotso</td><td>oo</td></tr></table> <p>DIACRITICAL SIGNS.</p> <p><i>Ruchoch</i>, a point below an aspirated letter to indicate that it is to be aspirated.</p> <p><i>Qushoi</i>, a little point over an aspirated letter to indicate that it is not to be aspirated.</p> <p><i>Ribut</i>, two points placed horizontally above the word to indicate the plural.</p> <p><i>Marhetono</i>, a line above a letter between two consonants to indicate the absence of a vowel. Besides, this line signifies 1) a number, 2) an abbreviation, 3) an exclamation.</p> <p><i>Mehagyono</i>, a line below a letter, to show that though without a vowel it is to be pronounced as if it had one.</p> <p><i>Linea occultans</i>, a line placed below a letter to denote that it is to be mute or omitted in pronunciation.</p> <p>PUNCTUATION.</p> <p>⋮ marks a single part of the premise of a sentence.</p> <p>⋮ marks the end of a premise; or, it is sign of interrogation.</p> <p>⋮ marks the single parts of the conclusion of a sentence; or, larger interrogations.</p> <p>❖ or :: at the end of a period.</p> <p>NUMERICAL VALUE.</p> <p>The consonants of the alphabet supply the numbers from 1 to 400; in compound numbers, the greater precedes. Within 500—900, the tens from 50—90 are denoted by a point standing aloft. The mark  under a unit denotes the thousands,  the tens-thousands,  the product of the thousands multiplied by the tens-thousands. In writing fractions, the numerator is denoted by a little stroke going from left to right, placed above the denominator.</p>				Figure		Name	Pronun- ciation.	Syriac.	Greek.	ܐ	α	Pethocho	ă	ܐ or ܐ	ι	Rebotzo	ě	ܐ	η	Chebotzo	ĩ	ܐ or ܐ	ο	Zekopho	o	ܐ ܐ ܐ	ο ̣	Etsotso	oo
Figure		Name	Pronun- ciation.																																	
Syriac.	Greek.																																			
ܐ	α	Pethocho	ă																																	
ܐ or ܐ	ι	Rebotzo	ě																																	
ܐ	η	Chebotzo	ĩ																																	
ܐ or ܐ	ο	Zekopho	o																																	
ܐ ܐ ܐ	ο ̣	Etsotso	oo																																	
Beth	ܒ	β	ܒ	β	b or v	2																														
Gomal	ܓ	γ	ܓ	γ	g	3																														
Dolath	ܕ	δ	ܕ	δ	d	4																														
He	ܗ	η	ܗ	η	h	5																														
Vau	ܘ	ο	ܘ	ο	W or V	6																														
Zain	ܙ	ζ	ܙ	ζ	z	7																														
Cheth	ܚ	χ	ܚ	χ	ch	8																														
Teth	ܬ	θ	ܬ	θ	t	9																														
Yud	ܝ	ι	ܝ	ι	y	10																														
Koph	ܟ	κ	ܟ	κ	ch	20																														
Lomad	ܠ	λ	ܠ	λ	l	30																														
Mim	ܡ	μ	ܡ	μ	m	40																														
Nun	ܢ	ν	ܢ	ν	n	50																														
Semcath	ܣ	σ	ܣ	σ	s	60																														
Ee	ܐ	α	ܐ	α	as in hebrew	70																														
Pe	ܦ	φ	ܦ	φ	p or f	80																														
Tsodé	ܥ	Ϟ	ܥ	Ϟ	ts or z	90																														
Quph	ܩ	ϙ	ܩ	ϙ	q	100																														
Rish	ܪ	ρ	ܪ	ρ	r	200																														
Shin	ܫ	σ	ܫ	σ	sh	300																														
Tau	ܬ	τ	ܬ	τ	th or t	400																														

LIGATURES.

 Olaph-Lomad.
  Lomad-Olaph.
  Double-Gomal.
  Double-Lomad.

SYRIAC

Cut in the printing-office of B. G. TEUBNER in Leipzig conformably to original drawings by Professor TULLBERG of Upsala and Professor BERNSTEIN of Breslau.

Form	Pronun- ciation	Name	Form	Pronun- ciation	Name	Form	Pronun- ciation	Name		
1	a or Spirit. lenis.	Olaph	29	gh	Gomal	57	z (gr. ζ)	Zain		
2			30			58				
3			31	d and dh		59	kh	Cheth		
4			32			60				
5	b and bh	Beth	33			61				
6			34			62				
7			35	d	Dolath	63	t	Teth		
8			36			64				
9	b		37			65				
10			38			66				
11			39	dh		67				
12			40			68				
13	bh		41			69				
14			42			70				
15			43	h	He	71	i	Yud		
16			44			72				
17	g and gh		45			73				
18			46			74				
19			47	c and ch		75	c and ch	Koph		
20	g	Gomal	48			76				
21			49			77				
22			50			78				
23	gh		51	w v u	Vau	79				
24			52			80				
25			53			81				
26			54			82				
27	c		55	c	Zain	83				
28			56			84				

SYRIAC

Form	Pronun- ciation	Name	Form	Pronun- ciation	Name	Form	Pronun- ciation	Name			
85	e	Koph	115	s	Semcath	145	sh	Shin			
86			116			146					
87			117			147					
88			118	148							
89			119	149							
90	ch		120	ee (hebr. y)	Ee	150	t and th				
91			121			151					
92			122			152					
93			123			153					
94			124			154					
95	l	Lomad	125	p and ph(f)	Phe	155	t	Tau			
96			126			156					
97			127			157					
98			128			158					
99			129			159					
100			130	ph f		160					
101			131								
102			132			Sharp s or ss		Tsodé	LIGATURES.		
103			133						161	al	Olaph- Lomad
104			134						162		
105	m	Mim	135	163	gg		Double- Gomal				
106			136	164							
107			137	165							
108			138	166							
109			139	167							
110	n	Nun	140	k	Quph	168					
111			141			169					
112			142			170		gv	Gomal- Vau		
113			143			171					
114			s			Semcath		144	sh	Shin	172	vn	Vau- Nun
						173					

SYRIAC

Form	Pronun- ciation	Name	Vowels, Accents and Orthographi- cal Signs		Points and Numbers		
			VOWELS AND ACCENTS.		POINTS.		
174	in	Yud-Nun	203	a Pethocho	224	229	
175			204		225	230	
176			la	Lomad- Olaph	205	e Rebotzo	226	231
177	206	227			232		
178	207	228					
180	lt	Lomad- Teth	208	i Chebotzo	233	Mark of marginal notes	
181			209		234	Number-Mark	
182			210				
183	ll	Double Lomad	211	o Zekopho	NUMBERS.		
184			212		Form	Value	
185			213				
186			214	u Etsotso			
187							
188							
189	lee	Lomad- Ee	ORTHOGRAPHICAL SIGNS.				
190			215	Ribui			
191			216	Mehagyono			
192	lt	Lomad- Tau	217	Marhetono			
193			218	Qushoi, Ruchoch			
194							
195	mn	Mim- Nun	219	Little hooks at the beginning of a word			
196			220		at the end of a word		
197			221				
198	na	Nun- Olaph	222	Strokes between the single letters to adjust the lines			
199			223				
200							
201	ssn	Tsodé- Nun					
202							
	ssg	Tsodé- Gomal					

ARABIC

Name	Form				Pronunciation	Numerical value
	Unconnected	Connected with a preceding letter	Connected with both	Connected with a following letter		
Elif	ا	ا	...	...	ن Spir. lenis	1
Ba	ب	ب	ب	ب	b	2
Ta	ت	ت	ت	ت	t	400
Tha	ث	ث	ث	ث	th	500
Jim	ج	ج	ج	ج	j	3
Hha	ح	ح	ح	ح	hh	8
Cha	خ	خ	خ	خ	ch	600
Dal	د	د	...	...	d	4
Dhal	ذ	ذ	...	...	dh or ds	700
Ra	ر	ر	...	...	r	200
Zay	ز	ز	...	...	z	7
Sin	س	س	س	س	s	60
Shin	ش	ش	ش	ش	sh	300
Ssad	ص	ص	ص	ص	ss or ç	90
Ddad	ض	ض	ض	ض	d or dd	800
Tta	ط	ط	ط	ط	tt or th	9
Zza	ظ	ظ	ظ	ظ	zz	900
Ain	ع	ع	ع	ع	و Spir. gutt.	70
Ghain	غ	غ	غ	غ	gh	1000
Fa	ف	ف	ف	ف	f	80
Qaf	ق	ق	ق	ق	k	100
Kaf	ك	ك	ك	ك	k soft	20
Lam	ل	ل	ل	ل	l	30
Mim	م	م	م	م	m	40
Nun	ن	ن	ن	ن	n	50
Ha	ه Final ه	ه Final ه	ه	ه	h	5
Waw	و	و	...	...	w	6
Ya	ي	ي	ي	ي	y, i	10

ORTHOGRAPHICAL SIGNS

ا ب ج د ه و ز ح ط ظ ع غ ف ق ك ل م ن ه و ي



VOWELS.

— Fatha, ä ä ě — Kesre, ĭ ě ' Damma, oo o

At the end of the substantives the vowels are doubled to indicate the case, viz.:

— on — in — an

This is called *Nunation*, because, in pronouncing, Nun is added to the vowel.

DIPHTHONGS:  ai  au as in german.

ORTHOGRAPHICAL SIGNS.

- ◌ Jezma, separating syllables, is written over the final consonant of all shut syllable and indicates, that the syllable is finished and the consonant to be pronounced with the preceding vowel; it corresponds to the *Shwa quiescens* of the Hebrew.
- ◌ Teshdid, mark of doubling. The final consonant of a syllable being the same as that beginning the following one, this consonant is written only once, but marked with the sign ◌, which corresponds to the Hebrew *Daghesh forte*. In African manuscripts it is written v or a.
- ◌ Hamza is placed generally above the Elif, when this is used as a consonant and furnished with a vowel; when this vowel is a Kesre, the Hamza is placed beneath; sometimes also it stands above the Y. In Kufic Korans it is supplied by a little green stroke, in Moorish or African manuscripts by a thick green or yellow dot.
- ◌ Wesla, joining-mark. The Elif, at the commencement of a word, is sometimes in pronunciation absorbed by the final vowel of the preceding word. In this case, the vowel of the Elif is elided and marked by the Wesla.
- ◌ Medda stands above an Elif pronounced by Fatha and followed by a Hamza; it indicates the prolongation of the a. It is placed, also, above an Elif at the commencement of a word, or instead of an omitted Elif. Besides, this sign is a mark of abbreviation.

PUNCTUATION.

There are no signs of punctuation in Arabic, only in the Koran the verses are separated by ✽. This sign, however, or ' or ' or a red dot, is employed also in other books at the end of a section. In manuscripts, sometimes, a new section begins with a word written in red colour; in manuscript dictionaries a red line is placed above each catch-word.

CIPHERS.

Formerly, the Arabs, like other oriental nations, used the letters of the alphabet to express numbers; at a later period, however, they adopted the following 10 special figures, called by us Europeans the Arabian ciphers, by the Arabs themselves the Indian ones.

١	٢	٣	٤	٥	٦	٧	٨	٩	٠
1	2	3	4	5	6	7	8	9	0

Regarding their composition and value they accord with our numerals, which are taken from them, whereas the consonants expressing ciphers are written from right to left, viz. ١٨٩١ (1861).

ARABIC LIGATURES

ب ج د هـ	Ba - Jim	ث	Tha - Cha
ح خ د هـ	Ba - Hha	ج ح	Jim - Jim
ح خ د هـ هـ	Ba - Hha - Jim	ح خ	Jim - Hha
ح خ د هـ	Ba - Cha	ح خ	Hha - Jim
ت ج د هـ	Ta - Jim	ح خ ج ح	Hha - Jim - Jim
ت ح د هـ	Ta - Hha	ح خ ج ح	Hha - Jim - Hha
ت ج د هـ	Ta - Cha	ح خ	Hha - Hha
ت ح د هـ	Tha - Hha	ح خ	Hha - Hha - Jim

ARABIC LIGATURES

	Hha - Cha		Kaf - Elif
	Cha - Jim		Lam - Elif
	Cha - Hha		Lam - Jim
	Sin - Jim		Lam - Jim - Hha
	Sin - Hha		Lam - Hha
	Sin - Cha		Lam - Hha - Jim
	Shin - Jim		Lam - Hha - Hha
	Shin - Hha		Lam - Cha
	Shin - Cha		Lam - Cha - Jim
	Ssad - Jim		Lam - Mim - Hha - Jim
	Ssad - Hha		Lam - Mim - Hha - Hha
	Ssad - Cha		Lam - Ya
	Ddad - Jim		Mim - Jim
	Ddad - Hha		Mim - Hha
	Tta - Hha		Mim - Hha - Jim
	Ain - Jim		Mim - Hha - Hha
	Ain - Hha		Mim - Cha
	Ghain - Jim		Nun - Jim
	Ghain - Hha		Nun - Hha
	Fa - Jim		Nun - Cha
	Fa - Hha		Ha - Jim
	Fa - Cha		Ha - Hha
	Fa - Ya		Ha - Cha
	Qaf - Jim		Ha - Mim
	Qaf - Hha		Ya - Jim
	Qaf - Cha		Ya - Jim - Hha
	Kaf - Elif		Ya - Hha
	Kaf - Jim		Ya - Hha - Hha
	Kaf - Hha		Ya - Cha

AETHIOPIAN AND AMHARIC

Name	Form							Pronunciation
	with ā	with ū	with î	with â	with ê	with ĕ	with ô	
Hoi	ሀ ha	ሁ hu	ሂ hi	ሃ ha	ሄ he	ህ he	ሆ ho	h
Lawi	ለ la	ሉ lu	ሊ li	ላ la	ሌ le	ሎ le	ሌ lo	l
Haut	ሐ ha	ሑ hu	ሐ hi	ሐ ha	ሐ he	ሐ he	ሐ ho	h
Mai	መ ma	ሙ mu	ሙ mi	መ ma	ሙ me	ሙ me	መ mo	m
Saut	ሠ sa	ሡ su	ሠ si	ሠ sa	ሠ se	ሠ se	ሠ so	s
Rees	ረ ra	ሩ ru	ረ ri	ረ ra	ረ re	ረ re	ረ ro	r
Sat	ሰ sa	ሱ su	ሰ si	ሰ sa	ሰ se	ሰ se	ሰ so	s
* Shat	ሸ sha	ሹ shu	ሸ shi	ሸ sha	ሸ she	ሸ she	ሸ sho	sh
Kaf	ቀ ka	ቁ ku	ቀ ki	ቀ ka	ቀ ke	ቀ ke	ቀ ko	k
Bet	በ ba	ቡ bu	በ bi	በ ba	በ be	በ be	በ bo	b
Tawi	ተ ta	ቲ tu	ተ ti	ተ ta	ተ te	ተ te	ተ to	t
* Tshawī	ቸ tsha	ቹ tshu	ቸ tshi	ቸ tsha	ቹ tshe	ቹ tshe	ቹ tsho	tsh
Harm	ሄ ha	ህ hu	ሄ hi	ሄ ha	ህ he	ህ he	ህ ho	h
Nahas	ከ na	ከ nu	ከ ni	ከ na	ከ ne	ከ ne	ከ no	n
* Gnahas	ኸ gna	ኹ gnu	ኸ gni	ኸ gna	ኹ gne	ኹ gne	ኸ gno	gn
Alf	አ a	አ u	አ i	አ a	አ e	አ e	አ o	a
Kaf	ከ ka	ከ ku	ከ ki	ከ ka	ከ ke	ከ ke	ከ ko	k
* Chaf	ኸ cha	ኹ chu	ኸ chi	ኸ cha	ኹ che	ኹ che	ኸ cho	ch
Wawi	ወ wa	ወ wu	ወ wi	ወ wa	ወ we	ወ we	ወ wo	w
Ain	ዐ a	ዐ u	ዐ i	ዐ a	ዐ e	ዐ e	ዐ o	y
Zai	ሀ za	ሁ zu	ሀ zi	ሀ za	ሀ ze	ሀ ze	ሀ zo	z
* Zshai	ሸ ja	ሹ ju	ሸ ji	ሸ ja	ሹ je	ሹ je	ሹ jo	j fr.
Yaman	የ ya	የ yu	የ yi	የ ya	የ ye	የ ye	የ yo	y
Dent	ደ da	ደ du	ደ di	ደ da	ደ de	ደ de	ደ do	d
* Jent	ጀ ja	ጀ ju	ጀ ji	ጀ ja	ጀ je	ጀ je	ጀ jo	j
Geml	ገ ga	ገ gu	ገ gi	ገ ga	ገ ge	ገ ge	ገ go	g
Tait	ተ ta	ቲ tu	ተ ti	ተ ta	ተ te	ተ te	ተ to	t
* Tshait	ቸ tsha	ቹ tshu	ቸ tshi	ቸ tsha	ቹ tshe	ቹ tshe	ቹ tsho	tsh
Pait	ፈ pa	ፈ pu	ፈ pi	ፈ pa	ፈ pe	ፈ pe	ፈ po	p
Tzadai	ፈ tsa	ፈ tsu	ፈ tsi	ፈ tsa	ፈ tse	ፈ tse	ፈ tso	ts
Tsappa	ፀ tsa	ፀ tsu	ፀ tsi	ፀ tsa	ፀ tse	ፀ tse	ፀ tso	ts
Aff	ፈ fa	ፈ fu	ፈ fi	ፈ fa	ፈ fe	ፈ fe	ፈ fo	f
Pa	ፐ pa	ፐ pu	ፐ pi	ፐ pa	ፐ pe	ፐ pe	ፐ po	p

DIPHTHONGS.

ቁ kua	ቁ kui	ቁ kua	ቁ kue	ቁ kue
ከከ hua	ከከ hui	ከከ hua	ከከ hue	ከከ hue
ከ kua	ከ kui	ከ kua	ከ kue	ከ kue
ገ gua	ገ gui	ገ gua	ገ gue	ገ gue

NOTE.

The Aethiopian and the Amharic are read from left to right. The words are separated by:— The alphabet of both languages is syllabic; the Amharic, however, has seven orders of letters (each order consisting of 7 forms or characters), wanting in Aethiopian, which, in the above table, are marked by *.

AETHIOPIAN

Cut in the printing-office of F. A. BROCKHAUS in Leipzig under the direction of the German Oriental Society.

With ä	With û	With î	With â	With ê	With ë	With ô
ሀ ha	ሁ hù	ሂ hì	ሃ há	ሄ hê	ህ he	ሆ hò
ለ la	ሉ lù	ሊ lì	ላ lá	ሌ lê	ሎ le	ሎ lô
ሐ ḥa	ሐ ḥù	ሐ ḥì	ሐ ḥâ	ሐ ḥê	ሐ ḥe	ሐ ḥô
መ ma	ሙ mù	ሚ mî	ማ mā	ሜ mê	ም me	ሞ mò
ሠ ṣa	ሠ ṣù	ሢ ṣî	ሣ ṣâ	ሤ ṣê	ሥ ṣe	ሦ ṣô
ረ ra	ሩ rù	ሪ rì	ራ rà	ራ rê	ሮ re	ሮ rô
ሰ sa	ሰ sù	ሰ sî	ሰ sâ	ሰ sê	ሰ se	ሰ sô
ቀ qa	ቁ qù	ቂ qî	ቃ qâ	ቄ qê	ቅ qe	ቆ qô
በ ba	ቡ bù	ቢ bì	ባ bâ	ቤ bè	ብ be	ቦ bò
ተ ta	ቱ tù	ቲ tî	ታ tâ	ቲ tê	ት te	ቶ tò
ኀ ḥa	ኀ ḥù	ኀ ḥì	ኀ ḥâ	ኀ ḥê	ኀ ḥe	ኀ ḥô
ነ na	ነ nù	ነ nî	ነ nâ	ነ nè	ነ ne	ነ nò
አ -a	አ -ù	አ -î	አ -â	አ -ê	አ -e	አ -ô
ከ ka	ከ kù	ከ kî	ከ kâ	ከ kê	ከ ke	ከ kô
ወ wa	ወ wù	ወ wî	ወ wâ	ወ wê	ወ we	ወ wô
ዐ ʿa	ዐ ʿù	ዐ ʿî	ዐ ʿâ	ዐ ʿê	ዐ ʿe	ዐ ʿô
ዘ za	ዘ zù	ዘ zî	ዘ zâ	ዘ zê	ዘ ze	ዘ zô
የ ya	የ yù	የ yî	የ yâ	የ yê	የ ye	የ yô
ደ da	ደ dù	ደ dî	ደ dâ	ደ dê	ደ de	ደ dô
ገ ga	ገ gù	ገ gî	ገ gâ	ገ gê	ገ ge	ገ gô
ጠ ṭa	ጠ ṭù	ጠ ṭî	ጠ ṭâ	ጠ ṭê	ጠ ṭe	ጠ ṭô
ጰ pa	ጰ pù	ጰ pî	ጰ pâ	ጰ pé	ጰ pe	ጰ pô
ጸ za	ጸ zù	ጸ zî	ጸ zâ	ጸ zê	ጸ ze	ጸ zô
ፀ za	ፀ zù	ፀ zî	ፀ zâ	ፀ zê	ፀ ze	ፀ zô
ፈ fa	ፈ fù	ፈ fî	ፈ fâ	ፈ fê	ፈ fe	ፈ fô
ፒ pa	ፒ pù	ፒ pî	ፒ pâ	ፒ pè	ፒ pe	ፒ pô

TURKISH.

The Turkish language is a compound of words taken from the Tatar, Persian and Arabic languages. The high dialect, only spoken at Constantinople by people of quality, and serving as the written language, is a compound of Persian and Arabic words. Like most oriental languages, Turkish is written and read from right to left.

- ا *Elif* supplies the german vowels *a, y, o, u*, the consonants of the word being hard; but the german *e, i, ö, ü*, the consonants being soft. When *Alif* is followed by a hard consonant, the ا (*Ustun*) is pronounced like *a*, the ع (*Esre*) like *y*, and the و (*Utru*) like *o* or *u*. Following, however, a soft consonant, the ا (*Ustun*) is to be read as *e*, the ع (*Esre*) as *i*, and the و (*Utru*) as *o* or *u*. In the middle and at the end of words, without *Hamzalif*, the *Alif* is always pronounced like *a*, but with *Hamzalif*, like *ê*.
- ب *Ba* is our *b*. After *Ta, Tha, Jim, Cha, Sin, Shin, Ssad, Tta, Qaf, Gef* it is often read like *p*.
- پ *Pa* is our *p*.
- ت *Ta* is our *t*. In the conjugation of some verbs it is changed into *Dal*.
- ث *Tha* is our *s* or *ss*, except the word ثلث *tult*. The Arabs pronounce it like *th*.
- ج *Jim*, the italian *g* before *e* or *i*. When meeting the consonants named above in connection with the letter ب, it is pronounced like *Tchim*.
- چ *Tchin* like our *ch* in chess.
- ح *Hha* like *h* in have.
- خ *Cha*, the german *ch* in brauchen.
- د *Dal* like *d*. It is pronounced like *t* when meeting the consonants named above in connection with the letter ب.
- ذ *Dhal* like *z*.
- ر *Ra* like *r*.
- ز *Za* like our *z*.
- س *Sin* like *s, ss*.
- ش *Shin* like *sh*.

- ص *Ssad* like sharp *ss*.
- ض *Ddad*, like our *z*; the Arabs pronounce it like *d*.
- ط *Tta* like *t* or *th*; it is often confounded with *Ta* and *Dal*.
- ظ *Zza* like our *z*.
- ع *Ain* like a strong guttural and nasal *a, y, u*.
- غ *Ghain* like *g* guttural.
- ف *Fa* like our *f*.
- ق *Qaf* like *k, kh* or *ck*.
- ك *Kaf*, like *q* or *k*, as in the french words *qui, quel*.
- گ *Gef*, accords with our *g* in give; in some cases it is pronounced like *gi* very soft; in the middle of words and in some terminations like *y*.
- ن *Saghur Nun*, i. e. mute *Nun*, like the french nasal-*n* in *mon, son*.
- ل *Lam* our *l*; in some cases it is soft like *l* in limb, in some hard like *l* in all.
- م *Mim*, like *m*.
- ن *Nun* our *n*; but when followed by a *Ba*, it is pronounced like *m*.
- و *Waw* our *w* or *v*; furnished with *Utru*, it is pronounced like *u* in conjunction with hard consonants; like german *ü* or *ö*, how ever, in conjunction with soft ones.
- ه *Ha* like our *h*; at the end of words it is mostly pronounced like *a* or *e*.
- ي *Lamelif*, *lu* or *lia* (Ligature).
- يا *Ya*, when a consonant like our *y*, when a vowel like *i*; it represents a vowel only in the middle or at the end of words.

ORTHOGRAPHICAL SIGNS.

- *Ustun* is placed over the consonants and pronounced like *a* with a hard consonant, like *e* with a soft one.
 - *Esre* below the consonants, is pronounced like vowel *y* with a hard consonant, but like *i* with a soft one.
 - *Utru* is pronounced like *o* or *u* with a hard consonant, but like *o* or *u* with a soft one.
 - = *Iki ustun* (double *Ustun*) like *en*.
 - = *Iki esre* (double *Esre*) like *in*.
 - = *Iki utru* (double *Utru*) like *on* or *un*.
- The three last marks are only employed in Arabic words.
- ° *Jesm* (sign of pause) is placed over a consonant wanting a vowel, followed by an other consonant.
 - ~ *Teshdid* or *Shedde* when placed over a consonant doubles it.
 - ~ *Meddelif* or *Medda*, is only placed over the *Alif*, which, then, is always pronounced like *a*.
 - ء *Hamzelif* or *Hamza*: placed over *Elif*, is pronounced like *ê*; over *Waw*, like *u*, over *Ya*, like *i*; at the end of words, ending with a vowel, like *i*.

PERSIAN

Name	Form				Pronun- ciation	Numer- value	Notes
	uncon- nected	connected with a preceding letter	connected with both	connected with a following letter			
Elif	ا	ا	Spiritus lenis	1	<p>Many Arabic words having been introduced into the Persian language, the Persian alphabet consists of 32 consonants, which are written and read from right to left; of these consonants, 28 are common to both languages; only the following four are purely Persian:</p> <p>گ ژ چ پ</p>
Ba	ب	ب	ا	ب	b	2	
Pa	پ	پ	پ	پ	p	...	
Ta	ت	ت	ت	ت	t soft	400	
Tha	ث	ث	ث	ث	s sharp	500	
Jim	ج	ج	ج	ج	j	3	
Tchim	چ	چ	چ	چ	tch	...	
Hhá	ح	ح	ح	ح	hh sharp	8	
Cha	خ	خ	خ	خ	kh guttur.	600	
Dal	د	د	..	..	d	4
Dhal	ذ	ذ	Z soft	700	<p>VOWELS.</p> <p>All Persian letters are consonants, except Elif, Waw and Ya, which also supply long vowels (the Waw, sometimes, represents a short vowel):</p> <p>ا و ی</p> <p>The short vowels are written thus:</p> <p>— Zabar, a — Zir, e — Pish, u</p>
Ra	ر	ر	..	..	r	200
Za	ز	ز	..	..	Z soft	7
Zha	ژ	ژ	..	..	zh or j french	...
Sin	س	س	س	س	S sharp	60	
Shin	ش	ش	ش	ش	sh	300	
Ssad	ص	ص	ص	ص	S sharp	90	
Ddad	ض	ض	ض	ض	Z hard	800	
Tta	ط	ط	ط	ط	t	9	
Zza	ظ	ظ	ظ	ظ	Z hard	900	
Ain	ع	ع	ع	ع	Spiritus lenis	70	<p>ORTHOGRAPHICAL SIGNS.</p> <p>ء Hamza, at the end of a word, sometimes supplies the Elif; it is also placed above an Elif in the middle of a word, when the Elif represents a consonant.</p> <p>ـ Teshdid, doubles the letter over which it is placed.</p> <p>ـ Medda. Instead of an Elif written twice, a Medda is placed over it. It is properly a second Elif, but written lengthwise; sometimes it has a vertical form.</p> <p>و Jezma, over a consonant by which a syllable ends. It is also placed over Waw or Ya, when they form a diphthong with a preceding.</p>
Ghain	غ	غ	غ	غ	gh guttur.	1000	
Fa	ف	ف	ف	ف	f	80	
Qaf	ق	ق	ق	ق	k guttur.	100	
Kaf	ك	ك	ك	ك	k	20	
Gaf	گ	گ	گ	گ	g palatal	...	
Lam	ل	ل	ل	ل	l	30	
Mim	م	م	م	م	m	40	
Nun	ن	ن	ن	ن	n	50	
Waw	و	و	..	..	w	6
Ha	ه	ه	ه	ه	h	5	<p>CIPHERS:</p> <p>To write numbers, the Persians employ either the alphabet, or the Arabic ciphers (see under).</p>
Ya	ی	ی	ی	ی	y and i	10	

LIGATURE.

لا Lam-Elif, la.

AFGHAN OR PUSHTOO

Figure			Pronun- ciation	Figure			Pronun- ciation
unconnected	in the midst	at the com- mencement		unconnected	in the midst	at the com- mencement	
ا	ا	ا	a, á, i, u	ش	ش	ش	sh
ب	ب	ب	b	ښ	ښ	ښ	khín
پ	پ	پ	p	ص	ص	ص	ss
ت	ت	ت	t	ض	ض	ض	dz
ټ	ټ	ټ	tt	ط	ط	ط	t
ث	ث	ث	t's	ظ	ظ	ظ	z
چ	چ	چ	t's	ع	ع	ع	æ, â
ج	ج	ج	j	غ	غ	غ	gh
ځ	ځ	ځ	ch	ف	ف	ف	f
ه	ه	ه	h	ق	ق	ق	k, q
خ	خ	خ	kh	ک	ک	ک	k
د	د	د	d	ګ	ګ	ګ	g
ډ	ډ	ډ	dd	ل	ل	ل	l
ز	ز	ز	z	م	م	م	m
ر	ر	ر	r	ن	ن	ن	n
ړ	ړ	ړ	rr	ڼ	ڼ	ڼ	rrn
ذ	ذ	ذ	z	و	و	و	w ú o
څ	څ	څ	dz	ځ	ځ	ځ	h
ژ	ژ	ژ	jz	ء	ء	ء	a
س	س	س	s	ي	ي	ي	y, e, í, ai

NOTES.

Before the introduction of arabic words, the original Pushtoo alphabet consisted only of 29 different sounds; at present, the Afghans make use also of the 28 arabic letters, and of these four letters used in Persian: **چ** and **څ**, from which results an alphabet of 40 different characters which are all consonants.

The Pushtoo vowels are the same as the Arabic and Persian:

— *Zabar* or *Fatha* a, — *Zer* or *Kasrah* e, — *Pesh* or *Zammah* u.

They are placed either above or under the consonant beginning a syllable, as: **ب** *ba*, **ب** *bi*, **ب** *bu*. *Zabar* followed by — is read as the

diphthong *au*; followed by **ي**, as the diphthong *ai*.

— or — *Jesm* or *Jesmah* indicates that the consonant has no vowel and the syllable is finished.

— *Meddah* or *Medd*, an other form of *Elif*, is sign of producing a syllable.

— *Teshdid* indicates that a consonant is to be pronounced double.

— *Wesla*, joining-mark.

— *Hamzah* supplies the place of *Elif*.

— *Tanwin* is the arabic Nunnation at the end of the words, pronounced by adding a *n* to the vowels: *an*, *in*, *yn*.

COPTIC

Figure	Name	Pronunciation	Notes
Α α	Alpha	ă	<p>The Coptic language is divided into two dialects: the upper-egyptian or thebaic or sahidic, and the lower-egyptian or memphitic or coptic par excellence, to which may be added a third, the bashmuric dialect. The letters Α — Ω in the Coptic alphabet are of greek origin; ϣ — Ϟ on the other hand signify sounds which either wanted at all in the greek language, or which since the christian era no longer used in writing; they are taken from the older egyptian. This sign † denotes the syllable ti; its prototype is the semitic and greek Tan.</p> <p>The vowels are:</p> <p style="text-align: center;">Α Ε Ι Ο,</p> <p>the ΟΟ is written by ΟΥ, like in greek; before a consonant it is pronounced by ΟΟ, before a vowel by υ. The coptic diphthongs are:</p> <p style="text-align: center;">ΑΙ ΕΙ ΟΙ</p> <p>pronounced in the sahidic dialect only as ĕ, ĭ, ĭ, in the memphitic, however, as the german diphthongs ai, ei, oi.</p>
Β β	Vida	b v	
Γ γ	Gamma	g	
Δ δ	Dalda	d	
Ε ε	Ei	ĕ	
Ζ ζ	Zida	z	
Η η	Hida	ĭ	
Θ θ	Thida	th	
Ι ι	Jauda	ĭ	
Κ κ	Kabba	k	
Λ λ	Laula	l	
Μ μ	Mi	m	
Ν ν	Ni	n	
Ξ ξ	Exi	x	
Ο ο	O	o short	
Π π	Pi	p b	
Ρ ρ	Ro	r	
Σ σ	Sima	s	
Τ τ	Dau	t d	
Υ υ	He	i, ü Germ.	
Φ φ	Phi	ph	
Χ χ	Chi	ch sc	
Ψ ψ	Ebsi	ps	
Ω ω	O	o long	
ϣ ϣ	Fei	f ph	<p>READING - SIGNS AND PUNCTUATION.</p> <p>˘ above a letter: the greek gravis.</p> <p>˘ behind a word in sahidic manuscripts: dividing sign.</p> <p>• signifies a greater pause, like our semicolon or point.</p> <p>⋮ signifies a shorter pause, like our comma.</p> <p>— sign of division.</p> <p>— sign of abbreviation above the characters.</p> <p>⌒ graphic sign above some characters in sahidic manuscripts.</p> <p>˙ diacritic sign behind some words in sahidic manuscripts.</p> <p>, Comma, only in later sahidic manuscripts.</p> <p>• orthographic sign above some characters in memphitic books.</p> <p style="text-align: center;">NUMERICAL VALUE.</p> <p>The numerical value of the coptic characters is the same as in greek. Numerals are written by — above the letters; the thousands are marked by , below near the letter. ϫ (90) supplies the place of the greek Ϟ (koppa).</p>
ϥ ϥ	Hori	h	
ϧ ϧ	Chei	kh	
Ϩ Ϩ	Scei	sh	
ϩ ϩ	Giangua	g dsh	
Ϫ Ϫ	Scima	sk sc gh	
ϫ ϫ	Dei Ligature	ti	
Ϭ Ϭ	So	Cipher 6	

CHINESE.

A calculation, based upon the Imperial Chinese Dictionary, shows that the Chinese language is represented by 43,496 characters or symbols. Of this number 13,000 are totally irrelevant and consist of signs which are obsolete, incorrectly formed, and unexplained. For the expressions in ordinary literature about 4000 signs appear to suffice. The writings of Con-foo-tse (Confucius) and his disciples can even be read by the help of only 2500 characters, and a knowledge of these will enable the student tolerably to understand all Chinese works on history and philosophy. In lieu of the phonetic and lexicographical system, which appertains to most languages, the Chinese have adopted 214 signs any of which, being placed by the side of an unknown character, indicates at once its pronunciation. These indicators of sound, are termed by the Chinese "*Tribunals*". European grammarians have called them "*Keys*" or "*Radicals*". Occasionally the "*Tones*" (modulating accents) are appended at the top or foot of the character, at the right or the left side. Such accents are described as follows,

1. 〇 even tone. 2. 〰 entering tone. 3. 〱 falling tone. 4. 〰 rising tone.

The "Keys" are divided into 17 Classes, according to the number of strokes of which each character is composed, and are arranged in the following order:

Class				Class			
1.	consisting of 1 stroke	extends from Nr.	1-6	10.	consisting of 10 strokes	extends from Nr.	187-194
2.	" 2 strokes	" " " "	7-29	11.	" 11 "	" " " "	195-200
3.	" 3 "	" " " "	30-60	12.	" 12 "	" " " "	201-204
4.	" 4 "	" " " "	61-94	13.	" 13 "	" " " "	205-208
5.	" 5 "	" " " "	95-117	14.	" 14 "	" " " "	209-210
6.	" 6 "	" " " "	118-146	15.	" 15 "	" " " "	211
7.	" 7 "	" " " "	147-166	16.	" 16 "	" " " "	212-213
8.	" 8 "	" " " "	167-175	17.	" 17 "	" " " "	214
9.	" 9 "	" " " "	176-186				

1. 一。 yī, one	17. 口 kǎn	33. 士。 s'z, scholar
2. 丨。 chiēh, perpendicular stroke	18. 刀 tou, knife	34. 久° fanfun
3. 丶。 tien, point	19. 力。 liē, strength	35. 夕° tsieh, slowly
4. 丿。 piēh, strokeslanting to the left	20. 勹。 chwen, equal, triangle	36. 夕° dsiēh, evening
5. 乚。 yī, crooked stroke	21. 匕 pi, spoon	37. 大 tá, great
6. 乚。 kiu, hooked stroke	22. 匚 fang, to pull out	38. 女° nü, girl
7. 二 urh, two	23. 匚。 kwah, division between fields	39. 子 tsè, son, child
8. 亠 yitiēn-yiwa	24. 十。 shiàh, ten	40. 冃 mou or poēn-an hat
9. 人。 jin, man	25. 卜 poh, to divine	41. 寸 tsun, inch
10. 儿。 chàh, foot	26. 冂° tsshi	42. 小 siou, small
11. 入。 shàh, to enter	27. 厂。 shì, shelter	43. 尢。 kang, horrible
12. 八。 pah, eight	28. 厶° chee, perverse	44. 尸° shì, corpse
13. 冂。 kwah, desert	29. 又° yiu, again, moreover	45. 屮° tso
14. 冂。 miēn, to cover	30. 口 kiu, mouth	46. 山° san, mountain
15. 冫 pin, ice	31. 口 hwei, return	47. 川° chuēn, stream
16. 几° chī, bench	32. 土 too, the ground	48. 工 kòng. artisan, time

- 49 己° *chì*, self
 50 巾° *chìn*, cloth
 51 干° *kan*, shield, spear
 52 么° *yuěh*, source
 53 广° *yìn*, hut
 54 久° *tsou*, long walk
 55 升° *kóng*, higher
 56 弋° *yiěh*, spear
 57 弓° *kóng*, a bow
 58 王° *kway*, Come!
 59 衫° *san*, coat
 60 彳° *shuang-jin*, two men
 61 心° *sin*, heart
 62 戈° *kóh*, a lance
 63 户° *w'ōō*, inner door
 64 手° *sheu*, hand
 65 支° *ts'*, branch
 66 攴° *chì*, the stalk
 67 攴° *funn*, gentle
 68 斗° *tou*, a measure
 69 斤° *chìn*, hatchet, pound
 70 方° *fang*, a square, then
 71 无° *f'ě*, no
 72 日° *shěh*, sun, day
 73 日° *yuěh*, to talk
 74 月° *yueh*, moon
 75 木° *moh*, tree
 76 欠° *chiěh*, debtor
 77 止° *ts'*, to stop
 78 歹° *tiě*, wicked
 79 爿° *kòh*, the young of animals
 80 毋° *f'ó*, is not
 81 比° *pi*, to compare
 82 毛° *mou*, feather
 83 氏° *sɿ*, clan
 84 气° *chì*, air
 85 水° *shway*, water
 86 火° *chaw*, fire
 87 爪° *tsou*, claws, nails
 88 父° *f'óh*, father
 89 爻° *yow*, sign
 90 月° *chwang*, pole
 91 片° *piěh*, splinter
 92 牙° *yah*, teeth
 93 牛° *niù*, ox
 94 犬° *ch'ěh*, dog
 95 玄° *yuěh*, interminable
 96 玉° *niòh*, gem
 97 瓜° *kwah*, melon
 98 瓦° *wàh*, tiles, earthenware
 99 甘° *kan*, sweet
 100 生° *senn*, to live, to give birth
 101 用° *yòng*, to use
 102 田° *tièn*, field
 103 疋° *piěh*, piece
 104 疒° *tsiěh*, sick
 105 火° *fàh*, to divide
 106 白° *buh*, white
 107 皮° *bi*, skin
 108 皿° *mìn*, implement
 109 目° *mòh*, eye
 110 矛° *maòh*, spear
 111 矢° *shi*, arrow
 112 石° *shiěh*, stone
 113 示° *sɿ*, to admonish
 114 肉° *nahy or shòh*, clapper of a bell
 115 禾° *haw*, grain
 116 穴° *yuěh*, cave
 117 立° *lǐě*, to stand
 118 竹° *chòh*, bamboo
 119 米° *mì*, rice
 120 糸° *s'ɿ*, silk

- 121 缶。 *f'ow*, jar
 122 网。 *kang*, hedge
 123 羊。 *yang*, sheep
 124 羽。 *ü*, long feathers
 125 老。 *laò*, old
 126 而。 *urh*, and
 127 耒。 *lie*, handle of a spade
 128 耳。 *ull*, the ear
 129 聿。 *yuèh*, to manifest, a baton
 130 肉。 *jòh*, flesh
 131 臣。 *chin*, an official
 132 自。 *ts'z*, from oneself
 133 至。 *tsz*, to arrive, extreme
 134 白。 *chiu*, mortar
 135 舌。 *chuweh*, tongue
 136 舛。 *chiah*, strong
 137 舟。 *chiu*, vessel
 138 艮。 *kun*, inferior order of nature
 139 色。 *sèh*, colour
 140 艸。 *tsaò*, grass
 141 虎。 *'hoo*, tiger
 142 虫。 *chóng*, insects
 143 血。 *shwèh*, blood
 144 行。 *jěh*, to walk, to act
- 145 衣。 *i*, clothing
 146 兩。 *yü*, twilight
 147 見。 *chièn*, to see
 148 角。 *krìh*, horn, corner
 149 言。 *nièn*, word
 150 谷。 *kòh*, apertures in rocks
 151 豆。 *tou*, head
 152 豕。 *shü*, swine
 153 豸。 *chi*, superior order of animals
 154 貝。 *pèi*, valuables
 155 赤。 *chèh*, red
 156 走。 *tsou*, to walk
 157 足。 *tsòh*, leg
 158 身。 *shin*, body
 159 車。 *chü*, cart
 160 辛。 *sin*, bitter, hardships
 161 辰。 *jěh*, an hour, azure
 162 走。 *tseu*, to run
 163 邑。 *jě*, a town
 164 酉。 *yoo*, twilight
 165 采。 *tsie*, to separate
 166 里。 *li*, one third of a mile
 167 金。 *chin*, gold, metal
 168 長。 *chang*, long
- 169 門。 *mun*, a door
 170 阜。 *fou*, a mound
 171 隸。 *dì*, to accomplish
 172 佳。 *chiah*, fine
 173 雨。 *yü*, rain
 174 青。 *tsin*, green
 175 非。 *feeh*, not
 176 面。 *mièn*, face
 177 革。 *kèh*, leather
 178 韋。 *hway*, high
 179 韭。 *chiu*, leeks
 180 音。 *yin*, a sound, tone
 181 頁。 *hièh*, a sheet, a leaf
 182 風。 *fong*, wind
 183 飛。 *fee*, to fly
 184 食。 *shèh*, to eat
 185 首。 *sheu*, head
 186 香。 *shiang*, scented
 187 馬。 *máa*, horse
 188 骨。 *kwèh*, bones
 189 高。 *kaò*, high
 190 影。 *kaò*, whiskers, beard
 191 鬥。 *tou*, to fight
 192 鬯。 *chang*, sweet wine

193 罇。 <i>lièh</i> , to cup open	201 黃。 <i>hwang</i> , yellow	208 鼠。 <i>chü</i> , rat
194 鬼。 <i>kway</i> , devil	202 黍。 <i>shü</i> , millet	209 鼻。 <i>pièh</i> , nose
195 魚。 <i>nü</i> , fish	203 黑。 <i>hèh</i> , black	210 齊。 <i>tsi</i> , to put in order, equal
196 鳥。 <i>niào</i> , bird	204 繡。 <i>chi</i> , embroidery	211 齒。 <i>ts'z</i> , the back teeth
197 鹵。 <i>loo</i> , brine	205 鼃。 <i>min</i> , a toad	212 龍。 <i>long</i> , dragon
198 鹿。 <i>lòh</i> , stag	206 鼎。 <i>tin</i> , tripod	213 龜。 <i>kway</i> , tortoise
199 麥。 <i>mèh</i> , wheat	207 鼓。 <i>koo</i> , drum	214 簫。 <i>yàh</i> , a musical instrument
200 麻。 <i>má</i> , hemp		

ARITHMETICAL FIGURES.

All arithmetical combinations are performed by 17 Cardinal figures. In the subjoined table, three different forms of numerical characters are given. The series in the left column represents the *plain hand* which serves for literary and ordinary purposes. In the middle column *words* are employed instead of figures. This class is used in bonds, contracts etc., where it is of importance to guard against alterations and fraud. The figures in the right column, written in a "running hand", are used by merchants and traders in keeping their business accounts.

一 壹。 | <i>yè</i> , 1	十 拾。 <i>shìah</i> , 10
二 貳。 || <i>wèh</i> , 2	百。 百。 <i>pèh</i> , 100
三 參。 川 <i>san</i> , 3	千。 千。 <i>tsièn</i> , 1000
四 肆。 乂 <i>s'z</i> , 4	萬。 万。 <i>van</i> , 10,000
五 伍。 𠂇 <i>oo</i> , 5	億。 億。 <i>ee</i> , 100,000
六 陸。 上 <i>loh</i> , 6	兆。 兆。 <i>chào</i> , 1,000,000
七 柒。 一 <i>tsiè</i> , 7	京。 京。 <i>chìn</i> , 10,000,000
八 捌。 三 <i>pàh</i> , 8	垓。 垓。 <i>nyàh</i> , 100,000,000
九 玖。 文 <i>chew</i> , 9	

The numbers by which 10, 100 etc. are multiplied are placed at the top of the multiplicand. The numbers added to ten etc., are marked below the figure.

Example + ten. $\begin{array}{c} \text{二} \\ + \\ \text{二} \end{array}$ twice ten and two, or 22.

JAPANESE

IN THE KATA-KANA CHARACTER.

(This type was cut under the direction of Prof. J. HOFFMAN of Leyden and cast by N. TETTERODE in Rotterdam.)

I-RO-FA (A b c).		THE JAPANESE ALPHABET organically arranged.*		
25 井 yi	1 イ i	1 ア a	25 ヲ se	49 バ ba
26 ノ no	2 ロ ro	2 ワ wa	26 ゼ ze	50 パ pa
27 オ o	3 ハ fa, va	3 エ e	27 シ si	51 ヘ fe
28 ク ku	4 ニ ni	4 イ i	28 ジ zi	52 ベ be
29 ヤ ya	5 ホ fo	5 オ o	29 ソ so	53. ペ pe
30 マ ma	6 ヘ fe, ve	6 シ wo	30 ゾ zo	54 ヒ fi
31 ケ ke	7 ト to	7 ウ u	31 ス su	55 ビ bi
32 フ fu	8 チ tsi	8 ヤ ya	32 ズ zu	56 ピ pi
33 コ ko	9 リ ri	9 エ ye	33 タ ta	57 ホ fo
34 エ ye	10 ヌ nu	10 井 yi	34 タ da	58 ボ bo
35 テ te	11 ル ru	11 ヨ yo	35 テ te	59 ポ po
36 ア a	12 シ wo	12 ュ yu	36 テ de	60 フ fu
37 サ sa	13 ワ wa	13 カ ka	37 チ tsi	61 ブ bu
38 キ ki	14 カ ka	14 ガ ga	38 ギ dsi	62 プ pu
39 ュ yu	15 ケ ke	15 ゲ ge	39 ト to	63 ナ na
40 メ me	16 ケ ke	16 キ ki	40 ド do	64 子 ne
41 ミ mi	17 ヨ yo	17 ギ gi	41 ツ tsu	65 ニ ni
42 シ si	18 ダ da	18 コ ko	42 ヅ dsu	66 ノ no
43 コ c	17 レ re	20 ゴ go	43 マ ma	67 ス su
44 ヒ fi, vi	18 ソ so	21 ク ku	44 メ me	68 シ n
45 モ mo	19 ツ tsu	22 グ gu	45 ミ mi	69 ラ ra
46 セ se	20 子 ne	23 サ sa	46 モ mo	70 レ re
47 ス su	21 ナ na	24 サ za	47 ム mu	71 リ ri
	22 ラ ra		48 ハ fa	72 ロ ro
	23 ム mu			73 ル ru
	24 ウ u			

* The accent *nigori*, consisting of two minute marks at the right of the syllable, softens the consonant. The accent *maru*, a dot likewise at the right, hardens the consonant. By the addition of these marks and the *n*, unattended by a vowel, the letters originally 47, are raised to the number of 73.

ABBREVIATIONS AND ORTHOGRAPHICAL SIGNS.

ㄱ koto. ㄴ goto. ㄷ site. ㅌ tama.

ˆ Sign of doubling a letter, placed in the middle line.

{ Sign of doubling a syllable.

} Sign of lengthening a vowel.

° Full stop. ˘ comma, towards the right, beyond the middle line.

SANSKRIT

The similarity of shape occasions mistakes in correcting proofs; it may therefore be of advantage both to compositors and readers of proofs to make use of the annexed numbers of reference. The form of the subjoined Alphabet differs from that which precedes, but is superior in point of correctness.

1 अ	a	27 ॠ	re(with Acc.)	53 क	kya	79 ङ	ńka
2 आ	â	28 ॡ	ai(with Acc.)	54 क़	kra	80 ङ़	ńkta
3 इ	i	29 ॢ	raiñ	55 कृ	kra	81 ङ्य	ńkya
4 ई	î	30 ः		56 क्ल	kla	82 ङ्ष	ńksha
5 उ	u	31 •		57 क्व	kva	83 ङ्ह	ńkha
6 ऊ	û	32 ॣ		58 क्ष	ksha(x)	84 ङ्य	ńkhya
7 ऋ	ri	33 ।	Accents and other orthographical signs.	59 क्श	ksh	85 ङ	ńga
8 ॠ	ri	34 ॥		60 क्श्म	kshma	86 ङ्य	ńgya
9 ऌ	li	35 ०		61 क्य	kshya	87 ङ	ńgha
10 ॡ	li	36 -		62 क्व	kshva	88 ङ्य	ńghya
11 ए	e	37 ऌ		63 ख	kha	89 ङ	ńghra
12 ऀ	â	38 ऍ		64 ख़	kh	90 ङ	ńña
13 ँ	î	39 ऎ		65 ख्य	khya	91 च	cha (éa)
14 ऀ	î	40 ए		66 ग	ga	92 च़	ch (é)
15 ँ	ri	41 -		67 ग़	g	93 च	éca
16 ॣ	u	42 ऀ		68 ग्न	gna	94 च़	écha
17 ॣ	û	43 ॠ		69 ग्य	gnya	95 च़	éña
18 ॣ	ri	44 ॡ		70 ग्र	gra	96 च	éma
19 ॣ	ri	45 ऀ		71 ग्र्य	grya	97 च्य	éya
20 ॣ	li	46 क	ka	72 घ	gha	98 छ	éha
21 ॣ	li	47 क़	kka	73 घ़	gh	99 छ़	éhra
22 ँ	e	48 क्त	кта	74 घ्न	ghna	100 ज	ja
23 ॢ	ai	49 क्य	ktya	75 घ्म	ghma	101 ज़	j
24 ॣ	o	50 क्व	ktra	76 घ्य	ghya	102 ज़	jja
25 ॠ	e(with Acc.)	51 क्न	kna	77 घ्र	ghra	103 ज़	jña
26 ॠ	re	52 क्म	kma	78 ङ	ńa	104 ङ	jñ

SANSKRIT

105	झ	jha	133	रड	ṇdra	161	थ	th	189	ध्य	dhya
106	ज्य	jya	134	रझ	ṇdrya	162	थ्य	thya	190	ध्र	dhra
107	ज	jra	135	रढ	ṇḍha	163	द	da	191	ध्व	dhva
108	जव	jva	136	ख	ṇṇa	164	दु	du	192	न	na
109	ज्	jha	137	ख्य	ṇya	165	दू	dū	193	न्	n
110	फ	jha	138	खव	ṇva	166	ह	ḍri	194	नत	nta
111	ज	ṇa	139	त	ta	167	ङ	dga	195	न्य	ntyā
112	उ	ṇ	140	त	t	168	ङ्	dgha	196	न्र	ntra
113	अ	ṇca	141	क	tka	169	ह	dda	197	नद	nda
114	अ	ṇja	142	त	tta	170	हु	ddba	198	नद्र	ndra
115	ट	ṭa	143	त्य	ttya	171	घ	ddya	199	नध	ndha
116	ड	ṭka	144	त्र	ttra	172	ङ	ddha	200	नध्र	ndhra
117	ट्ट	ṭṭa	145	त्त	ttva	173	घ	ddhya	201	न्न	nna
118	थ्य	ṭya	146	तन	tna	174	ङ	dna	202	न्र	npra
119	ठ	ṭha	147	तप	tpa	175	ङ	dba	203	न्रफ	npha
120	थ्य	ṭhya	148	तप्र	tpra	176	ङ	dbra	204	न्रफ	nphra
121	ठ्	ṭhra	149	तफ	tpha	177	ङ	dbha	205	न्रम	nma
122	ड	ḍa	150	तफ	tphra	178	घ	dbhya	206	न्य	nya
123	ड	ḍḍa	151	तम	tma	179	घ	dma	207	न्रस	nsa
124	डु	ḍḍa	152	तम्य	tmya	180	घ	dya	208	प	pa
125	ढ	ḍha	153	तय	tya	181	द्र	dra	209	प	p
126	ढ्य	ḍhya	154	त्र	tra	182	घ	drya	210	प्र	pta
127	ढ्र	ḍhra	155	त्रय	trya	183	ङ	dva	211	प्र	pna
128	ण	ṇa	156	त्रव	tva	184	ङ	dvyā	212	प्प	ppa
129	ण	ṇ	157	त्स	tsa	185	ध	dha	213	प्प	pma
130	णट	ṇṭa	158	त्स	tsna	186	ध	dh	214	प्य	pya
131	णढ	ṇṭha	159	त्स्य	tsya	187	ध्न	dhna	215	प्र	pra
132	णड	ṇḍa	160	थ	tha	188	ध्म	dhma	216	प्र	pla

SANSKRIT

217	प	pva	245	य	ya	273	श्र	çra	301	स्म	sma
218	प्	psa	246	र	y	274	श्	çla	302	स्म्य	smya
219	फ	pha	247	च	y	275	श्र	çva	303	स्य	sya
220	ब	ba	248	य्य	yya	276	श्श	çça	304	स्र	sra
221	ठ	b	249	र	ra	277	ष	sha	305	स्व	sva
222	ब्	bgha	250	रु	ru	278	ष	sh	306	स्स	ssa
223	ब्ज	bja	251	रु	rû	279	ष्ट	shṭa	307	ह	ha
224	ब्द	bda	252	ल	la	280	ष्ट्य	shṭya	308	ह	h
225	ब्ध	bdha	253	ल	l	281	ष्ट्र	shṭra	309	ह	hri
226	ब्ब	bba	254	ल्क	lka	282	ष्ट्र्य	shṭrya	310	ह्र	hṛa
227	ब्भ	bbha	255	ल्प	lpa	283	ष्ट्र्य	shṭrya	311	ह्र	hna
228	ब्र	bra	256	ल्म	lma	284	ष्टु	shṭva	312	ह्र	hma
229	भ	bha	257	ल्य	lya	285	ष्ट	shṭha	313	ह्य	hya
230	भ	bh	258	ल्ल	lla	286	ष्ण	shṇa	314	ह्र	hra
231	भ्य	bhya	259	ल्व	lva	287	ष्प	shpa	315	ह्र	hla
232	भ्र	bhra	260	व	va	288	ष्प्र	shpra	316	ह्र	hva
233	भ्व	bhva	261	ठ	v	289	ष्म	shma	317	ळ	ḷ
234	म	ma	262	व	v	290	ष्य	shya	318	ह्र	ḥa
235	म्	m	263	व्य	vya	291	स	sa	319	१	1
236	म्न	mna	264	व्र	vra	292	स्	s	320	२	2
237	म्प	mpa	265	व्व	vva	293	स्क	ska	321	३	3
238	म्प्र	mpra	266	श	ça	294	स्व	skha	322	४	4
239	म्ब	mba	267	श	ça	295	स्त	sta	323	५	5
240	म्भ	mbha	268	श्	ç	296	स्त्र	stra	324	६	6
241	म्य	mya	269	श्	ç	297	स्थ	stha	325	७	7
242	म्र	mra	270	श्र	çéa	298	स्न	sna	326	८	8
243	म्ल	mlla	271	श्र्य	çéya	299	स्प	spa	327	९	9
244	मस्	msa	272	श्न	çna	300	स्फ	spha	328	०	0

TAMIL

The Tamil language was earlier cultivated than the other members of the Dravidian family. It includes two dialects the (ancient) *Shen-Tamil* and the (modern) *Kodun-Tamil*. Tamil is spoken throughout the plain of the Carnatic, below the ghauts from Pulicat to cape Comorin, to the neighbourhood of Trivandrum; also in the northern and western part of Ceylon where in ancient times Tamilians established their settlements. This language has 12 vowels and 18 consonants. It is read from left to right.

SHORT VOWELS.

அ	a	as in America
இ	i	» » fill
உ	u	» » full
எ	e	» » self
ஓ	o	» » long

THE CORRESPONDING LONG VOWELS.

ஆ	â	in ah
ஈ	î	» feel
ஊ	û	» foo
ஏ	ê	» they
ஔ	ô	» sole

DIPHTHONGS.

ஐ	ey	in eye
ஔ	ou	» foul

CONSONANTS.

க	k	
ங	ñ	ng in long
ச	s	
ஞ	ñ	as gn in french <i>règne</i>
ட	ṭ	like t d of Sanscrit cerebrals
ந்	ṇ	like n of Sanscrit cerebral
த	t	
ந	n	in no
ப	p	
ம	m	
ற்	r	rolled. partly like a cerebral.
ல்	l	partly like a dental
ய்	y	as in yes
ர	r	» » round
ல்	l	» » lap
வ்	v	
ள்	l	hard, it is of cerebral character
ழ்	l	intermediate between r and l.

LIQUIDS.

ய்	y	as in yes
ர	r	» » round
ல்	l	» » lap
வ்	v	
ள்	l	hard, it is of cerebral character
ழ்	l	intermediate between r and l.

The consonants have been divided into *rough*, *soft* and *intermediate* sounds. The first class includes the *tenues* (க, ச, ட, த, ப, ம). The second class contains the corresponding Nasals. The third class contains the Liquids. A dot placed at the top of a consonant indicates the absence of a vowel, but is omitted in native MSS.

The following rules are to be noticed in the pronunciation.

a) Short *a*, before the soft letters ன், ண், the intermediate letters ற், ல், ள், ழ், and at the end of polysyllabic words, sounds like *e* in men.

b) Combined with a preceding *ṛ* it receives the same sound.

c) The vowels *e* and *ê* as initials are pronounced as if *y* were placed before them.

d) The vowels *i* (î) and *e* (ê) before linguals (ட, ண் and ள், ழ் and ழ்) are respectively articulated somewhat deeper than the French *u* and *eu*.

e) The consonants க, த, ப are only hardened as initial letters, or when doubled in the middle of a word. The same is the case with ட which does not occur as an initial in pure Tamil words.

f) When க, ட, த, ப occur as medials of a word, க sounds like *ch*, ட like *b*, த like *th*, and ட like the Sanscrit cerebral *d*.

g) ழ is always sharply hissed like *ss*. When the nasal ஞ precedes, it coalesces with it and sounds like *ng* (in *angel*). When doubled after ட or ழ, it sounds like *ch* (in *church*).

h) *e* and *y* at the end of a syllable have an intermediate sound of *i* (in *vine*) and *ai* (in *vain*).

i) Double ழ sounds like *tt*. After the corresponding nasal ன், it may be pronounced like *d*.

The Tamil Alphabet being syllabic, a word is divisible in any part, so long as the consonant remains united with its vowel. In punctuation the full stop alone is employed.

The vowels, in their separate forms, are only used as initials. The following table shows their mode of coalition with the consonants. The short *a*, as in Sanscrit, is not expressed before a consonant.

	a	ā	i	ī	u	ū	e	ē	ey	o	ō	au
	அ	ஆ	இ	ஈ	உ	ஊ	எ	ஏ	ஐ	ஓ	ஔ	ஒள
k	க	கா	கி	கீ	கு	கூ	கெ	கே	கை	கொ	கோ	கௌ
ñ	ங											
s	ச	சா	சி	சீ	சு	சூ	செ	சே	சை	சொ	சோ	சௌ
ñ	ஞ	ஞா	ஞி	ஞீ	ஞு	ஞூ	ஞெ	ஞே	ஞை	ஞொ	ஞோ	ஞௌ
t	ட	டா	டி	டீ	டு	டூ	டெ	டே	டை	டொ	டோ	டௌ
ṇ	ண	ணா	ணி	ணீ	ணு	ணூ	ணெ	ணே	ணை	ணொ	ணோ	ணௌ
t	த	தா	தி	தீ	து	தூ	தெ	தே	தை	தொ	தோ	தௌ
ñ	ந	நா	நி	நீ	நு	நூ	நெ	நே	நை	நொ	நோ	நௌ
p	ப	பா	பி	பீ	பு	பூ	பெ	பே	பை	பொ	போ	பௌ
m	ம	மா	மி	மீ	மு	மூ	மெ	மே	மை	மொ	மோ	மௌ
y	ய	யா	யி	யீ	யு	யூ	யெ	யே	யை	யொ	யோ	யௌ
r	ர	ரா	ரி	ரீ	ரு	ரூ	ரெ	ரே	ரை	ரொ	ரோ	ரௌ
l	ல	லா	லி	லீ	லு	லூ	லெ	லே	லை	லொ	லோ	லௌ
v	வ	வா	வி	வீ	வு	வூ	வெ	வே	வை	வொ	வோ	வௌ
!	ழ	ழா	ழி	ழீ	ழு	ழூ	ழெ	ழே	ழை	ழொ	ழோ	ழௌ
l	ள	ளா	ளி	ளீ	ளு	ளூ	ளெ	ளே	ளை	ளொ	ளோ	ளௌ
r	ற	றா	றி	றீ	று	றூ	றெ	றே	றை	றொ	றோ	றௌ
n	ன	னா	னி	னீ	னு	னூ	னெ	னே	னை	னொ	னோ	னௌ

ADDITIONAL LETTERS AND CONTRACTIONS.

ஷ்	ஷ	ஷி	ஷீ	ஸ்	ஸ	ஃ	ம ^r	ஹ்	உ	
sh	shā	shī	shī	s	sā	ch	Month	Year	Om	a sacred word

NUMERALS.

க	உ	ந	ச	ரு	கூ	எ	அ	க	ய	ந	சூ
1	2	3	4	5	6	7	8	9	10	100	1000

Examples of compound numbers, ஐக = 11, ஐஉ = 12 etc.

ZEND

BURMESE

FORM	SOUND	FORM	SOUND
𐬀	a	𐬁	z
𐬂	â	𐬃	ñ
𐬄	i	𐬅	t
𐬆	î	𐬇	ʈ
𐬈	u	𐬉	th
𐬊	û	𐬋	d
𐬌	e (e)	𐬍	dh
𐬎	è	𐬏	n
𐬐	é	𐬑	p
𐬒	o	𐬓	f
𐬔	ô	𐬕	b
𐬖	ào	𐬗	m
𐬙	an	𐬚	y initial
𐬛	k	𐬜	y medial
𐬞	kh	𐬟	r
𐬠	q	𐬡	v initial
𐬢	g	𐬣	v medial
𐬤	gh	𐬥	w
𐬧	n	𐬨	ç
𐬩	é (ch)	𐬪	sh
𐬬	j	𐬭	s
𐬯	sh	𐬰	h

PUNCTUATION.

. ° °

VOWELS			
FORM	SOUND	FORM	SOUND
ဒ	a	ဇ	è
ဒာ	â	ဒဲ	ey
ကျ	ie	ဇွဲ	ăü
ဌ	ee	ဇွဲ	au
ပွဲ	u o	ဒံ	ăṇ
ပွဲ	ù 00	ဒံး	ăḥ
CONSONANTS			
က	k	ဒ	d
ခ	kh	ဇ	dh
ဂ	g	ဖ	n
ဃ	gh	ပ	p
င	ng & gn	ဖ	ph
စ	ch	ဗ	b
ဆ	chh	ဘ	bh
ဇ	j	မ	m
ည	jh	ယ	y
ည	ñ	ရ	r
တ	ʈ	လ	l
ထ	th	ဝ	w
ဒ	d	သ	s
ဌ	dh	တ	h
က	ṇ	င	ʈ
တ	t	ဒံ	ăṇ
ထ	th		

CANARESE (CARNĀTACA).

This language, belonging to the Dravidian family, is spoken throughout the plateau of Mysore, in some of the western districts of the Nizam territory, and in the district of Canara on the Malabar coast.

ಅ a	ಎ ê	ಒ nga	ತ ta	ಯ ya
ಆ â	ಐ ai	ಚ cha	ಥ tha	ರ ra
ಇ i (ee)	ಒ o	ಛ chha	ದ da	ಲ la
ಈ î (ēē)	ಓ ô	ಜ ja	ಧ dha	ವ va
ಉ u (oo)	ಔ au	ಝ jha	ನ na	ಶ sa
ಊ û (ōō)	ಃ ṁ	ಞ ña	ಪ pa	ಷ sha
ಋ ṛ	ಃ ḥ	ಟ t'a	ಫ pha	ಸ za
ೠ ṛ'	ಕ ka	ಠ t'ha	ಬ ba	ಹ ha
ಲ l	ಖ kha	ಡ d'a	ಭ bha	ಲ la
ಲ' l'	ಗ ga	ಢ d'ha	ಮ ma	ಶ sha
ಎ e	ಘ gha	ಙ n'a		

LIGATURES

ಕೆ ki	ಞ್ ñu	ವಾ dâ	ಢ್ nna	ವಾ vâ
ಕು ku	ಢ್ d'e	ಡಿ di	ಪು pû	ವು vu
ಕೊ kô	ಢ್ d'o	ಡಿ di	ಪು pra	ವು vû
ಕ್ಷೆ ksha	ತಿ ti	ದೆ de	ಞ್ bhu	ವಿ vr
ಗಾ ga	ತಿ ti	ದ್ರಿ dri	ಷ್ mma	ವಿ vr'
ಗಿ gi	ತು tu	ಢ n	ರಾ râ	ವಿ vai
ಗು gu	ತೆ te	ಢ್ nâ	ರೆ re	ವು vvu
ಗಿ ge	ತೈ tai	ನಿ ni	ಲಾ lâ	ಷಾ shâ
ಗಿê gê	ತು ttu	ನಿ ni	ಲಾ lû	ಷ sht'a
ಗೈ gai	ತು tte	ನು nu	ಲಾ lô	ಹೊ hô
ಞ್ ñâ	ತು tra	ನೆ ne	ವಿ va	

TELUGU

one of the branches of the Dravidian stock, is spoken along the eastern coast of India from the neighbourhood of Pulicat to Chicacole. Inland it extends to the eastern boundary of the Maratha Country and Mysore, including within its range the ceded districts and Kurnool, the greater part of the territories of the Nizam, the Hyderabad Country and a portion of the Nagpore Country. This language is spoken by about 14 millions.

అ a	ఐ é	ఙ nga	త ta	ర ra
ఆ â	ఎ ê	చ cha	థ tha	ల la
ఇ i (ee)	ఒ o	ఛ chha	ద da	వ va
ఈ î (ēē)	ఓ ô	జ ja	ధ dha	శ sa
ఉ u (oo)	ఔ uo	ఝ jha	న na(soft)	ష sha
ఊ ū (ōō)	ఁ ñ	ఞ nya	ప pa	స sa
ఋ r̥	ః ḥ	ట ṭ'a	ఫ pha	హ ha
ౠ r̄	క ka	ఠ ṭ'ha	బ ba	ఱ ḷa
ఌ i	ఖ kha	డ ḍ'a	చ bha	ఱ sha
఍ i'	గ ga	ఢ ḍ'ha	మ ma	ఱ Pause
ఏ e	ఘ gha	ణ ṇ'a(hard)	య ya	

LIGATURES

కా kâ	ఝా jhâ	మా mâ	తి ti	లి l, li
కు ku	బా jhî	మి mi	తీ tî	లు lu
కూ kû	బూ jhû	ము mu	తు tu	లో lo
కొ ko	బొ ñâ	మె me	తె te	లొ lla
క్ష ksha	బౌ nu	మొ mo	త్తు ttu	లొ lli
గె ge	నా nâ	మ్ము mmu	త్రా tra	వా vâ
గే gê	ని ni	యా yâ	దా dâ	వు vu
గాu	నీ nî	యి yi	ది dî	వె ve
ఘా ghâ	ను nu	యె ye	దు du	వొ vva
ఘు ghu	నే ne	యొ yo	దె de	వొ vvu
ఘృ ghû	న్నా nna	రా râ	దొ do	శి si
జా ngâ	పొ po	రి ri	క్ష ddu	షా shâ
జొ ngu	ప్పొ ppu	బొ ñû	క్షా ddhâ	షా sht'a
చి chi	బా bâ	టె t'e	ధా dhâ	సా sâ
చు chu	బు bu	డు d'u	ర ri	సా ssâ
చే che	భా bhâ	డు d'hu	రు ru	

BENGALI.

This Alphabet is based on the Devanagari character. In some instances the circular shape has been altered into an angular form, in others the form has been entirely changed. The Bengali language is less mixed than the neighbouring idioms.

VOWELS.		CONSONANTS.				THE VOWELS
অ a	ৗ lri	ক ka	ঙ ña	খ dha	ল la	sounded after the consonants take their position before, after above and below their letters. They receive in such cases the following forms.
আ á	ৗ lri	খ kha	ট ta	ন na	ব va	ৗ follows its cons.
ই i	এ e	গ ga	ঠ tha	প pa	শ sha	f i precedes " ")
ঈ í	ঐ ai	ঘ gha	ড da	ফ pha	স sa	ৗ í follows " "
উ u	ও o	ঙ nga	ঢ dha	ব ba	ষ sha	u is subjoined
ঊ ú	ঔ au	চ tsha	ণ na	ভ bha	হ ha	ú " "
ঋ ri	অং ang	ছ tshha	ত ta	ম ma	ঋ khya	< ri " "
ঌ rí	অঃ ah	জ ja	থ tha	য ya		≥ rí " "
		ঝ jha	দ da	র ra		ৗ e precedes

OBSERVATIONS.

The vowel-sound of the short a is inherent in all consonants.

∖ (birdm) subjoined to a consonant causes the a to drop. A consonant moreover loses its a by being attached to the following consonant.

J denotes y affixed to a consonant.

∕ denotes r. It is placed at the top of the letter, and sounded before it.

ৗ r stands under a consonant and is pronounced after it.

ৗ over a consonant, represents its nasal sound.

ৗ denotes the word *Ganesh*.

ৗ denotes the name of God.

| serves as a stop at the end of a sentence.

ৗ e precedes

ৗ ai "

ৗ 10 take the cons. in the middle.

ৗ au take the cons. in the middle.

ৗ ang follows the cons.

ৗ ah follows the cons.

BÚGÍŚ

is supposed to be the most ancient of the languages spoken in the island of Celebes. The same Alphabet is used in the Macassar language.

ৗ a	ৗ ba	ৗ ra	ৗ la
ৗ ka	ৗ ma	ৗ cha	ৗ wa
ৗ kha	ৗ pha	ৗ ja	ৗ sa
ৗ ga	ৗ ta	ৗ a	ৗ ha
ৗ nga	ৗ da	ৗ chha	ৗ ya
ৗ pa	ৗ na	ৗ ra	

Every consonant has an inherent vowel, with which it forms a separate syllable.

The following vowels vary in position:

ৗ e before a letter.

ৗ i over a letter.

ৗ o after a letter.













ৗ u under a letter.

ৗ ung at the top of a letter.

JAVANESE

ORDINARY LETTERS			INITIAL LETTERS		
Ordin. Form	Pasangans	Sound	Ordin. Form	Pasangans	Sound
.. 𑄂 𑄂 hâ 𑄂 ..	—	.. Nâ ..
.. 𑄃 𑄃 nâ ..	—	.. 𑄃 Tyâ ..
.. 𑄄 𑄄 tyâ 𑄄 ..	—	.. Kâ ..
.. 𑄅 𑄅 râ 𑄅 𑄅 Tâ ..
.. 𑄆 𑄆 kâ ..	𑄆 or 𑄆	—	.. Sâ ..
.. 𑄇 𑄇 dâ 𑄇 𑄇 Pâ ..
.. 𑄈 𑄈 tâ 𑄈 ..	—	.. Nyâ ..
.. 𑄉 𑄉 sâ 𑄉 ..	—	.. Gâ ..
.. 𑄊 𑄊 wâ 𑄊 ..	—	.. Bâ ..
.. 𑄋 𑄋 lâ ..	UNCONNECTED VOWELS. 𑄌 𑄍 𑄎 𑄏 𑄐 a i u e o		
.. 𑄌 ..	.. 𑄌 ..	.. pâ ..	
.. 𑄍 ..	.. 𑄍 ..	.. dâ ..	
.. 𑄎 ..	.. 𑄎 ..	.. dyâ ..	
.. 𑄏 ..	.. 𑄏 ..	.. yâ ..	
.. 𑄐 𑄐 nyâ ..	ADDITIONAL CONSONANTS. The following four letters, with the sign 𑄑 (<i>Sastrosworo</i>) at the top, occur in words derived from the Arabic, as there are no consonants in the Javanese Alphabet, which fully express these sounds.		
.. 𑄑 ..	.. 𑄑 ..	.. mâ ..	
.. 𑄒 ..	.. 𑄒 ..	.. gâ ..	
.. 𑄓 ..	.. 𑄓 ..	.. bâ ..	
.. 𑄔 ..	.. 𑄔 ..	.. tâ ..	
.. 𑄕 ..	.. 𑄕 ..	.. ngâ ..	
~~~~~	~~~~~	~~~~~	NUMERALS. 𑄖 𑄗 𑄘 𑄙 𑄚 𑄛 𑄜 𑄝 𑄞 𑄟 1 2 3 4 5 6 7 8 9 0		
.. 𑄖 ..	.. 𑄖 ..	<i>Pâ-tyerc', rè</i>			
.. 𑄗 ..	—	<i>Ngâ-letet, lè</i>			
.. 𑄘 ..	.. 𑄘 ..	.. châ ..			
.. 𑄙 ..	.. 𑄙 ..	.. fâ ..			
.. 𑄚 ..	.. 𑄚 ..	.. zâ ..			
.. 𑄛 ..	.. 𑄛 ..	.. ghâ ..			
.. 𑄜 ..	.. 𑄜 ..	.. châ ..			
.. 𑄝 ..	.. 𑄝 ..	.. fâ ..			
.. 𑄞 ..	.. 𑄞 ..	.. zâ ..			
.. 𑄟 ..	.. 𑄟 ..	.. ghâ ..			

VOWELS AND DIACRITICAL SIGNS,  
called *Sandangan*.

Form	Name	Sound and power
	Pěpět	ě
	Ulú or Wulu	i
	Suku	u
	Taling	e
	Taling-Tarung	o
	Paten or Pánton	(deprives a consonant of its vowel)
	Ságnyan or Wignyan	h (at the end of a syllable)
	Tyěty'a	ng (at the end of a syllable)
	Layar	r' (at the end of a syllable)
	Tyákrâ	r' (between a consonant and a succeeding letter)
	Kěřět	rě (after a consonant)
	Pínkal	y (after a consonant)

PODOS OR PADAS.

Under this designation the Javanese writing contains the following signs:



*Podo tukur*. With this sign superiors begin their letters to inferiors.



*Podo madyo* is used at the commencement of letters by persons of equal rank.



*Podo andap*, with this superscription an inferior addresses a superior.



*Podo-bab* stands at the beginning of a new paragraph.



*Podo-lingso*, the usual stop at the end of a sentence or a detached word. In poetry it marks the end of verses, which are written consecutively like prose. It is doubled at the end of a section.

1 *Podo andegging lyelatu* or *dirgo muraras* occasionally replaces the *Podo-lingso*; mostly it accompanies numerals, and isolates them from the adjoining words.



2 *Utu munta*. When the vowel of a final syllable is an *ulu*, this character takes a *Tyety'a* in the centre.



3 *Suku meudut*. When the vowel of the last syllable is a *Suku* it takes this form.



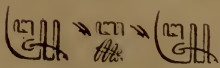
4 *Dirgo mure* is the name of the sign placed over the *Taling* or *Taling-Tarung*, when this vowel occurs in the final syllable.



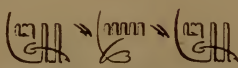
5 *Podo watyan anglegenno*. Under this name the *Tarung* is employed as a sign of separation.



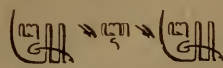
6 *Piselep ingstembarg gede*, serves to divide poetry.



*Purwo-podo* stands at the beginning of poems.



*Madyo-podo*, at the beginning of a song following another, when the melody and the measure are changed.



*Wasono-podo* at the end of a poem.

## LIGATURES.

The following ligatures consist of the (Vowel-) sings *Suku*, *Tyokro*, *Keret* and *Pinkal* combined with the ordinary characters and *Pansangans*. The diacritical marks are also added.

ᮊ	ᮃ	ᮄ	ᮅ	ᮆ	ᮇ	ᮈ	ᮉ
ᮊᮊ	ᮊᮃ	ᮊᮄ	ᮊᮅ	ᮊᮆ	ᮊᮇ	ᮊᮈ	ᮊᮉ
ᮋ	ᮋᮃ	ᮋᮄ	ᮋᮅ	ᮋᮆ	ᮋᮇ	ᮋᮈ	ᮋᮉ
ᮌ	ᮌᮃ	ᮌᮄ	ᮌᮅ	ᮌᮆ	ᮌᮇ	ᮌᮈ	ᮌᮉ
ᮍ	ᮍᮃ	ᮍᮄ	ᮍᮅ	ᮍᮆ	ᮍᮇ	ᮍᮈ	ᮍᮉ
ᮎ	ᮎᮃ	ᮎᮄ	ᮎᮅ	ᮎᮆ	ᮎᮇ	ᮎᮈ	ᮎᮉ
ᮏ	ᮏᮃ	ᮏᮄ	ᮏᮅ	ᮏᮆ	ᮏᮇ	ᮏᮈ	ᮏᮉ
ᮐ	ᮐᮃ	ᮐᮄ	ᮐᮅ	ᮐᮆ	ᮐᮇ	ᮐᮈ	ᮐᮉ
ᮑ	ᮑᮃ	ᮑᮄ	ᮑᮅ	ᮑᮆ	ᮑᮇ	ᮑᮈ	ᮑᮉ
ᮒ	ᮒᮃ	ᮒᮄ	ᮒᮅ	ᮒᮆ	ᮒᮇ	ᮒᮈ	ᮒᮉ
ᮓ	ᮓᮃ	ᮓᮄ	ᮓᮅ	ᮓᮆ	ᮓᮇ	ᮓᮈ	ᮓᮉ
ᮔ	ᮔᮃ	ᮔᮄ	ᮔᮅ	ᮔᮆ	ᮔᮇ	ᮔᮈ	ᮔᮉ
ᮕ	ᮕᮃ	ᮕᮄ	ᮕᮅ	ᮕᮆ	ᮕᮇ	ᮕᮈ	ᮕᮉ
ᮖ	ᮖᮃ	ᮖᮄ	ᮖᮅ	ᮖᮆ	ᮖᮇ	ᮖᮈ	ᮖᮉ
ᮗ	ᮗᮃ	ᮗᮄ	ᮗᮅ	ᮗᮆ	ᮗᮇ	ᮗᮈ	ᮗᮉ
ᮘ	ᮘᮃ	ᮘᮄ	ᮘᮅ	ᮘᮆ	ᮘᮇ	ᮘᮈ	ᮘᮉ
ᮙ	ᮙᮃ	ᮙᮄ	ᮙᮅ	ᮙᮆ	ᮙᮇ	ᮙᮈ	ᮙᮉ
ᮚ	ᮚᮃ	ᮚᮄ	ᮚᮅ	ᮚᮆ	ᮚᮇ	ᮚᮈ	ᮚᮉ
ᮛ	ᮛᮃ	ᮛᮄ	ᮛᮅ	ᮛᮆ	ᮛᮇ	ᮛᮈ	ᮛᮉ
ᮜ	ᮜᮃ	ᮜᮄ	ᮜᮅ	ᮜᮆ	ᮜᮇ	ᮜᮈ	ᮜᮉ
ᮝ	ᮝᮃ	ᮝᮄ	ᮝᮅ	ᮝᮆ	ᮝᮇ	ᮝᮈ	ᮝᮉ
ᮞ	ᮞᮃ	ᮞᮄ	ᮞᮅ	ᮞᮆ	ᮞᮇ	ᮞᮈ	ᮞᮉ
ᮟ	ᮟᮃ	ᮟᮄ	ᮟᮅ	ᮟᮆ	ᮟᮇ	ᮟᮈ	ᮟᮉ
ᮠ	ᮠᮃ	ᮠᮄ	ᮠᮅ	ᮠᮆ	ᮠᮇ	ᮠᮈ	ᮠᮉ
ᮡ	ᮡᮃ	ᮡᮄ	ᮡᮅ	ᮡᮆ	ᮡᮇ	ᮡᮈ	ᮡᮉ
ᮢ	ᮢᮃ	ᮢᮄ	ᮢᮅ	ᮢᮆ	ᮢᮇ	ᮢᮈ	ᮢᮉ
ᮣ	ᮣᮃ	ᮣᮄ	ᮣᮅ	ᮣᮆ	ᮣᮇ	ᮣᮈ	ᮣᮉ
ᮤ	ᮤᮃ	ᮤᮄ	ᮤᮅ	ᮤᮆ	ᮤᮇ	ᮤᮈ	ᮤᮉ
ᮥ	ᮥᮃ	ᮥᮄ	ᮥᮅ	ᮥᮆ	ᮥᮇ	ᮥᮈ	ᮥᮉ
ᮦ	ᮦᮃ	ᮦᮄ	ᮦᮅ	ᮦᮆ	ᮦᮇ	ᮦᮈ	ᮦᮉ
ᮧ	ᮧᮃ	ᮧᮄ	ᮧᮅ	ᮧᮆ	ᮧᮇ	ᮧᮈ	ᮧᮉ
ᮨ	ᮨᮃ	ᮨᮄ	ᮨᮅ	ᮨᮆ	ᮨᮇ	ᮨᮈ	ᮨᮉ
ᮩ	ᮩᮃ	ᮩᮄ	ᮩᮅ	ᮩᮆ	ᮩᮇ	ᮩᮈ	ᮩᮉ
᮪	᮪ᮃ	᮪ᮄ	᮪ᮅ	᮪ᮆ	᮪ᮇ	᮪ᮈ	᮪ᮉ
᮫	᮫ᮃ	᮫ᮄ	᮫ᮅ	᮫ᮆ	᮫ᮇ	᮫ᮈ	᮫ᮉ
ᮬ	ᮬᮃ	ᮬᮄ	ᮬᮅ	ᮬᮆ	ᮬᮇ	ᮬᮈ	ᮬᮉ
ᮭ	ᮭᮃ	ᮭᮄ	ᮭᮅ	ᮭᮆ	ᮭᮇ	ᮭᮈ	ᮭᮉ
ᮮ	ᮮᮃ	ᮮᮄ	ᮮᮅ	ᮮᮆ	ᮮᮇ	ᮮᮈ	ᮮᮉ
ᮯ	ᮯᮃ	ᮯᮄ	ᮯᮅ	ᮯᮆ	ᮯᮇ	ᮯᮈ	ᮯᮉ
᮰	᮰ᮃ	᮰ᮄ	᮰ᮅ	᮰ᮆ	᮰ᮇ	᮰ᮈ	᮰ᮉ
᮱	᮱ᮃ	᮱ᮄ	᮱ᮅ	᮱ᮆ	᮱ᮇ	᮱ᮈ	᮱ᮉ
᮲	᮲ᮃ	᮲ᮄ	᮲ᮅ	᮲ᮆ	᮲ᮇ	᮲ᮈ	᮲ᮉ
᮳	᮳ᮃ	᮳ᮄ	᮳ᮅ	᮳ᮆ	᮳ᮇ	᮳ᮈ	᮳ᮉ
᮴	᮴ᮃ	᮴ᮄ	᮴ᮅ	᮴ᮆ	᮴ᮇ	᮴ᮈ	᮴ᮉ
᮵	᮵ᮃ	᮵ᮄ	᮵ᮅ	᮵ᮆ	᮵ᮇ	᮵ᮈ	᮵ᮉ
᮶	᮶ᮃ	᮶ᮄ	᮶ᮅ	᮶ᮆ	᮶ᮇ	᮶ᮈ	᮶ᮉ
᮷	᮷ᮃ	᮷ᮄ	᮷ᮅ	᮷ᮆ	᮷ᮇ	᮷ᮈ	᮷ᮉ
᮸	᮸ᮃ	᮸ᮄ	᮸ᮅ	᮸ᮆ	᮸ᮇ	᮸ᮈ	᮸ᮉ
᮹	᮹ᮃ	᮹ᮄ	᮹ᮅ	᮹ᮆ	᮹ᮇ	᮹ᮈ	᮹ᮉ
ᮺ	ᮺᮃ	ᮺᮄ	ᮺᮅ	ᮺᮆ	ᮺᮇ	ᮺᮈ	ᮺᮉ
ᮻ	ᮻᮃ	ᮻᮄ	ᮻᮅ	ᮻᮆ	ᮻᮇ	ᮻᮈ	ᮻᮉ
ᮼ	ᮼᮃ	ᮼᮄ	ᮼᮅ	ᮼᮆ	ᮼᮇ	ᮼᮈ	ᮼᮉ
ᮽ	ᮽᮃ	ᮽᮄ	ᮽᮅ	ᮽᮆ	ᮽᮇ	ᮽᮈ	ᮽᮉ
ᮾ	ᮾᮃ	ᮾᮄ	ᮾᮅ	ᮾᮆ	ᮾᮇ	ᮾᮈ	ᮾᮉ
ᮿ	ᮿᮃ	ᮿᮄ	ᮿᮅ	ᮿᮆ	ᮿᮇ	ᮿᮈ	ᮿᮉ
ᯀ	ᯀᮃ	ᯀᮄ	ᯀᮅ	ᯀᮆ	ᯀᮇ	ᯀᮈ	ᯀᮉ
ᯁ	ᯁᮃ	ᯁᮄ	ᯁᮅ	ᯁᮆ	ᯁᮇ	ᯁᮈ	ᯁᮉ
ᯂ	ᯂᮃ	ᯂᮄ	ᯂᮅ	ᯂᮆ	ᯂᮇ	ᯂᮈ	ᯂᮉ
ᯃ	ᯃᮃ	ᯃᮄ	ᯃᮅ	ᯃᮆ	ᯃᮇ	ᯃᮈ	ᯃᮉ
ᯄ	ᯄᮃ	ᯄᮄ	ᯄᮅ	ᯄᮆ	ᯄᮇ	ᯄᮈ	ᯄᮉ
ᯅ	ᯅᮃ	ᯅᮄ	ᯅᮅ	ᯅᮆ	ᯅᮇ	ᯅᮈ	ᯅᮉ
ᯆ	ᯆᮃ	ᯆᮄ	ᯆᮅ	ᯆᮆ	ᯆᮇ	ᯆᮈ	ᯆᮉ
ᯇ	ᯇᮃ	ᯇᮄ	ᯇᮅ	ᯇᮆ	ᯇᮇ	ᯇᮈ	ᯇᮉ
ᯈ	ᯈᮃ	ᯈᮄ	ᯈᮅ	ᯈᮆ	ᯈᮇ	ᯈᮈ	ᯈᮉ
ᯉ	ᯉᮃ	ᯉᮄ	ᯉᮅ	ᯉᮆ	ᯉᮇ	ᯉᮈ	ᯉᮉ
ᯊ	ᯊᮃ	ᯊᮄ	ᯊᮅ	ᯊᮆ	ᯊᮇ	ᯊᮈ	ᯊᮉ
ᯋ	ᯋᮃ	ᯋᮄ	ᯋᮅ	ᯋᮆ	ᯋᮇ	ᯋᮈ	ᯋᮉ
ᯌ	ᯌᮃ	ᯌᮄ	ᯌᮅ	ᯌᮆ	ᯌᮇ	ᯌᮈ	ᯌᮉ
ᯍ	ᯍᮃ	ᯍᮄ	ᯍᮅ	ᯍᮆ	ᯍᮇ	ᯍᮈ	ᯍᮉ
ᯎ	ᯎᮃ	ᯎᮄ	ᯎᮅ	ᯎᮆ	ᯎᮇ	ᯎᮈ	ᯎᮉ
ᯏ	ᯏᮃ	ᯏᮄ	ᯏᮅ	ᯏᮆ	ᯏᮇ	ᯏᮈ	ᯏᮉ
ᯐ	ᯐᮃ	ᯐᮄ	ᯐᮅ	ᯐᮆ	ᯐᮇ	ᯐᮈ	ᯐᮉ
ᯑ	ᯑᮃ	ᯑᮄ	ᯑᮅ	ᯑᮆ	ᯑᮇ	ᯑᮈ	ᯑᮉ
ᯒ	ᯒᮃ	ᯒᮄ	ᯒᮅ	ᯒᮆ	ᯒᮇ	ᯒᮈ	ᯒᮉ
ᯓ	ᯓᮃ	ᯓᮄ	ᯓᮅ	ᯓᮆ	ᯓᮇ	ᯓᮈ	ᯓᮉ
ᯔ	ᯔᮃ	ᯔᮄ	ᯔᮅ	ᯔᮆ	ᯔᮇ	ᯔᮈ	ᯔᮉ
ᯕ	ᯕᮃ	ᯕᮄ	ᯕᮅ	ᯕᮆ	ᯕᮇ	ᯕᮈ	ᯕᮉ
ᯖ	ᯖᮃ	ᯖᮄ	ᯖᮅ	ᯖᮆ	ᯖᮇ	ᯖᮈ	ᯖᮉ
ᯗ	ᯗᮃ	ᯗᮄ	ᯗᮅ	ᯗᮆ	ᯗᮇ	ᯗᮈ	ᯗᮉ
ᯘ	ᯘᮃ	ᯘᮄ	ᯘᮅ	ᯘᮆ	ᯘᮇ	ᯘᮈ	ᯘᮉ
ᯙ	ᯙᮃ	ᯙᮄ	ᯙᮅ	ᯙᮆ	ᯙᮇ	ᯙᮈ	ᯙᮉ
ᯚ	ᯚᮃ	ᯚᮄ	ᯚᮅ	ᯚᮆ	ᯚᮇ	ᯚᮈ	ᯚᮉ
ᯛ	ᯛᮃ	ᯛᮄ	ᯛᮅ	ᯛᮆ	ᯛᮇ	ᯛᮈ	ᯛᮉ
ᯜ	ᯜᮃ	ᯜᮄ	ᯜᮅ	ᯜᮆ	ᯜᮇ	ᯜᮈ	ᯜᮉ
ᯝ	ᯝᮃ	ᯝᮄ	ᯝᮅ	ᯝᮆ	ᯝᮇ	ᯝᮈ	ᯝᮉ
ᯞ	ᯞᮃ	ᯞᮄ	ᯞᮅ	ᯞᮆ	ᯞᮇ	ᯞᮈ	ᯞᮉ
ᯟ	ᯟᮃ	ᯟᮄ	ᯟᮅ	ᯟᮆ	ᯟᮇ	ᯟᮈ	ᯟᮉ
ᯠ	ᯠᮃ	ᯠᮄ	ᯠᮅ	ᯠᮆ	ᯠᮇ	ᯠᮈ	ᯠᮉ
ᯡ	ᯡᮃ	ᯡᮄ	ᯡᮅ	ᯡᮆ	ᯡᮇ	ᯡᮈ	ᯡᮉ
ᯢ	ᯢᮃ	ᯢᮄ	ᯢᮅ	ᯢᮆ	ᯢᮇ	ᯢᮈ	ᯢᮉ
ᯣ	ᯣᮃ	ᯣᮄ	ᯣᮅ	ᯣᮆ	ᯣᮇ	ᯣᮈ	ᯣᮉ
ᯤ	ᯤᮃ	ᯤᮄ	ᯤᮅ	ᯤᮆ	ᯤᮇ	ᯤᮈ	ᯤᮉ
ᯥ	ᯥᮃ	ᯥᮄ	ᯥᮅ	ᯥᮆ	ᯥᮇ	ᯥᮈ	ᯥᮉ
᯦	᯦ᮃ	᯦ᮄ	᯦ᮅ	᯦ᮆ	᯦ᮇ	᯦ᮈ	᯦ᮉ
ᯧ	ᯧᮃ	ᯧᮄ	ᯧᮅ	ᯧᮆ	ᯧᮇ	ᯧᮈ	ᯧᮉ
ᯨ	ᯨᮃ	ᯨᮄ	ᯨᮅ	ᯨᮆ	ᯨᮇ	ᯨᮈ	ᯨᮉ
ᯩ	ᯩᮃ	ᯩᮄ	ᯩᮅ	ᯩᮆ	ᯩᮇ	ᯩᮈ	ᯩᮉ
ᯪ	ᯪᮃ	ᯪᮄ	ᯪᮅ	ᯪᮆ	ᯪᮇ	ᯪᮈ	ᯪᮉ
ᯫ	ᯫᮃ	ᯫᮄ	ᯫᮅ	ᯫᮆ	ᯫᮇ	ᯫᮈ	ᯫᮉ
ᯬ	ᯬᮃ	ᯬᮄ	ᯬᮅ	ᯬᮆ	ᯬᮇ	ᯬᮈ	ᯬᮉ
ᯭ	ᯭᮃ	ᯭᮄ	ᯭᮅ	ᯭᮆ	ᯭᮇ	ᯭᮈ	ᯭᮉ
ᯮ	ᯮᮃ	ᯮᮄ	ᯮᮅ	ᯮᮆ	ᯮᮇ	ᯮᮈ	ᯮᮉ
ᯯ	ᯯᮃ	ᯯᮄ	ᯯᮅ	ᯯᮆ	ᯯᮇ	ᯯᮈ	ᯯᮉ
ᯰ	ᯰᮃ	ᯰᮄ	ᯰᮅ	ᯰᮆ	ᯰᮇ	ᯰᮈ	ᯰᮉ
ᯱ	ᯱᮃ	ᯱᮄ	ᯱᮅ	ᯱᮆ	ᯱᮇ	ᯱᮈ	ᯱᮉ
᯲	᯲ᮃ	᯲ᮄ	᯲ᮅ	᯲ᮆ	᯲ᮇ	᯲ᮈ	᯲ᮉ
᯳	᯳ᮃ	᯳ᮄ	᯳ᮅ	᯳ᮆ	᯳ᮇ	᯳ᮈ	᯳ᮉ
᯴	᯴ᮃ	᯴ᮄ	᯴ᮅ	᯴ᮆ	᯴ᮇ	᯴ᮈ	᯴ᮉ
᯵	᯵ᮃ	᯵ᮄ	᯵ᮅ	᯵ᮆ	᯵ᮇ	᯵ᮈ	᯵ᮉ
᯶	᯶ᮃ	᯶ᮄ	᯶ᮅ	᯶ᮆ	᯶ᮇ	᯶ᮈ	᯶ᮉ
᯷	᯷ᮃ	᯷ᮄ	᯷ᮅ	᯷ᮆ	᯷ᮇ	᯷ᮈ	᯷ᮉ
᯸	᯸ᮃ	᯸ᮄ	᯸ᮅ	᯸ᮆ	᯸ᮇ	᯸ᮈ	᯸ᮉ
᯹	᯹ᮃ	᯹ᮄ	᯹ᮅ	᯹ᮆ	᯹ᮇ	᯹ᮈ	᯹ᮉ
᯺	᯺ᮃ	᯺ᮄ	᯺ᮅ	᯺ᮆ	᯺ᮇ	᯺ᮈ	᯺ᮉ
᯻	᯻ᮃ	᯻ᮄ	᯻ᮅ	᯻ᮆ	᯻ᮇ	᯻ᮈ	᯻ᮉ
᯼	᯼ᮃ	᯼ᮄ	᯼ᮅ	᯼ᮆ	᯼ᮇ	᯼ᮈ	᯼ᮉ
᯽	᯽ᮃ	᯽ᮄ	᯽ᮅ	᯽ᮆ	᯽ᮇ	᯽ᮈ	᯽ᮉ
᯾	᯾ᮃ	᯾ᮄ	᯾ᮅ	᯾ᮆ	᯾ᮇ	᯾ᮈ	᯾ᮉ
᯿	᯿ᮃ	᯿ᮄ	᯿ᮅ	᯿ᮆ	᯿ᮇ	᯿ᮈ	᯿ᮉ

ᯀ The small pasangan *Wo* is placed below a letter standing in the third row.

ᯁ ᯂ ᯃ These small diacritical marks are placed under auxiliary letters which stand in the third row.

ᯄ The short *Layar* is employed when there is no room for the large *Layar*.

ᯅ This mark is placed under the letters *Wo* and *Ngo* to form the vowels *u* and *o*.

## OBSERVATIONS.

The Javanese language has 20 letters which are called *Aksoro*, *Sastro* or *Tiarakan*. They are written from left to right, without being joined together. By the many auxiliary letters, vowels and diacritical signs, the numbers of characters is considerably increased. The *Pasangans*, employed in the Alphabet, are in close connexion with the sign *Paten*, which in fact they replace. When a consonant occurs in the middle of a word, and is to be deprived of its vowel, a *Paten* must be employed. To

obviate a disjunction arising from the use of this sign, the *Paten* is omitted, but the letter, which follows the mute consonant, is changed in form or in position or in both. The substituting sign is then called *Pasangan*. The *Pasangans* being mostly placed under the common letters, while some vowels and diacritical signs figure above the letters, the Javanese writing runs within three rows. The position of a character in one row or another is indicated in this Alphabet by the addition of dots.





## MANTSHU

Name	Form				Value	Name	Form				Value
	unconnected	initial	medial	final			unconnected	initial	medial	final	
A					a	Sha					sh
E					e	Ta					t
I					i	Da					d
O					o	Te					t
U					u	De					d
Ō					ô	La					l
An					an	Ma					m
Na					n	Cha					ch
Ka					k	Ja					j
Ga					g aspirated	Ya					y
Kha					kh guttural	Ke					k
Ba					b soft	Ge					g
Pa					p aspirated	Khe					kh guttural
Za					z	Ra					r

## MANTSHU

Name	Form				Value	LIGATURES				Value
	unconnected	initial	medial	final		unconnected	initial	medial	final	
Fa					f					bi
Wa					w					bo
Dze					dz					bu
Tze					tz					bo long
Zha					j (French)					pi
Se					s					po
Chha					chh					pu
Jha					jh					po long
CONSONANTS BEFORE CONSONANTS.										
DIPHTHONGS.										
					ua					re
					ue					re

ACCENTS.

· softens the sound.

◌ changes the letters into gutturals.

PUNCTUATION.

◌ equal to semicolon.

◌◌ equal to full stop.

THE NUMERALS

are composed of letters, as

1 10 100

The Mantshu characters are written from the top downwards. The lines are read from left to right, as

## MONGOLIAN

CONSONANTS				VOWELS			
Initial	Medial	Final	Value	Initial	Medial	Final	Value
ᠨ	ᠨ	ᠨ	n	ᠠ	ᠠ	ᠠ	a
ᠪ	ᠪ	ᠪ	b	ᠡ	ᠡ	ᠡ	e
ᠳ	ᠳ	ᠳ	ch Scotch	ᠢ	ᠢ	ᠢ	i
ᠬ	ᠬ	ᠬ	gh guttural	ᠣ	ᠣ	ᠣ	o
ᠬ	ᠬ	ᠬ	k	ᠤ	ᠤ	ᠤ	u
ᠬ	ᠬ	ᠬ	g	ᠥ	ᠥ	ᠥ	ö
ᠮ	ᠮ	ᠮ	m	ᠦ	ᠦ	ᠦ	ü
ᠯ	ᠯ	ᠯ	l				
ᠷ	ᠷ	ᠷ	r				
ᠲ	ᠲ	ᠲ	t				
ᠳ	ᠳ	ᠳ	d				
ᠶ	ᠶ	ᠶ	y				
ᠵ	ᠵ	ᠵ	z, dz				
ᠴ	ᠴ	ᠴ	ts or ch				
ᠰ	ᠰ	ᠰ	s				
ᠱ	ᠱ	ᠱ	sh				
ᠰ	ᠰ	ᠰ	w				

## PUNCTUATION.

“ This sign divides sentences.

⋄ is used at the end of a period.

Mongolian books are not numbered by the page but by the folio. It is usual to head each folio by ᠡ or some other mark like this.

## OBSERVATIONS.

Like the Mantshu the Mongolian characters are written in perpendicular lines from left to right. The Alphabet consists of seven vowels, together with diphthongs derived from them, and of seventeen consonants which vary in form according to their position at the beginning, the middle, and the end of a word; or according to the

effect exercised upon them by certain orthographical rules. — The consonants are not regarded as isolated sounds, but are always joined to vowels with which they form simple syllables. An exception is made to this rule when a consonant occurs as the final of a syllable or a word. But even such final consonants may be attended by a vowel. A variation of the Mongolian characters is known under the name of *Galik*.



## ARMENIAN

Form	Name	Value	Num.- power	Form	Name	Value	Num.- power.	
Ա	ա	Jpe	a	1	մ	mien	m	200
Բ	բ	pien	p	2	յ	he or ye	h or y (in toy)	300
Գ	գ	kim	k ck	3	ն	noo	n	400
Դ	դ	tah	t (soft)	4	շ	shah	sh	500
Ե	ե	yetch	y (cons.)	5	ո	wo	WO(in word) or O(in move)	600
Զ	զ	zah	z	6	տ	tchah	tch	700
Է	է	è	e (in met)	7	ր	bé	b	800
Ը	ը	yet	e(in paper)	8	ճ	tché	ch (soft)	900
Թ	թ	twoh	t (hard)	9	ռ	rah	r (hard)	1000
Ժ	ժ	zhe	j (French)	10	ս	sé	s	2000
Ի	ի	inni	i (in ill)	20	վ	viev	v	3000
Լ	լ	lunè	l	30	Տ	dune	d	4000
Խ	խ	khe	ch(German)	40	Ր	ré	r (soft)	5000
Ջ	ճ	dzah	z (Italian)	50	Յ	tzvoh	tz (hard)	6000
Կ	կ	ghien	g (hard)	60	Դ	unc	u (in due)	7000
Ն	ն	kwoh	h	70	Փ	pure	p	8000
Չ	չ	tzah	tz (soft)	80	Գ	ké	k	9000
Ղ	ղ	ghahd	γ(Romaic)	90	Օ	o	o	10000
Ճ	ճ	jé	j	100	Ֆ	pha	f	20000

## LIGATURES.

ՅԼ hn	ԼՍ ls	ՄԵ me	ՄԻ mi	ՄՆ mn
ԼԵ ye v	ԼՂ lu	ՄԴ mg	ՄԴԻ mye	ՄՆ վ n

## ACCENTS AND PUNCTUATIONS.

‘ acute	’ apostrophe	˘ sign of length
˘ grave	, comma	° sign of brevity and abbrevi- ation
◌̣ circumflex	: colon or semicolon	˘ sign of abbreviation, it also con- verts a letter into a numeral.
˘ rough breathing	. full stop	
˘ soft breathing	˘ hyphen	

# GEORGIAN.

The Georgian language is written in two Alphabets. The ancient character, used in the Bible and ecclesiastical works, is called *Khūtsūri* (i. e. sacerdotal). The character *Mkhedrūli* (or rather *Mkhedrūli khēli* i. e. Soldier's hand) is used in ordinary writing and printing.

KHŪTSŪRI				MKHEDRŪLI					
Form	Value	Form	Value	Form	Name	Value	Form	Name	Value
ა	a	ბ	s	ა	an	a	უ	un	oo
ბ	b	გ	t	ბ	ban	b	ჟ		w
გ	g	დ	oo	გ	gan	g	ვ	vě	vě
დ	d	ე	v	დ	don	d	ფ	phar	ph
ე	e	ქ	p'h	ე	en	e	ჩ	khān	kh
ვ	w	ც	k	ქ	win	v	ც	ghan	gh (ع Arab.)
ზ	z	ძ	gh (Arab.)	ც	zen	z	ძ	qar	q (ق Arab.)
ჲ	h, ě (short)	წ	q	ძ	he	e	წ	shin	sh
თ	th	ყ	sh	წ	than	th	ჭ	chin	ch
ი	i	ჩ	ch	ყ	in	i	ც	tzan	tz
კ	k'	ც	ts	ჩ	kan	k	ძ	dzil	dz
ლ	l	ძ	ds	ც	las	l	წ	thzil	thz
მ	m	წ	thz	ძ	man	m	ჭ	jar	j
ნ	n	ჭ	kh	წ	nar	n	ხ	khan	kh (rough)
ი	i (short)	ხ	kh	ძ	ie	i (short)	ძ	khhar	kh (very rough)
ო	o	ჟ	kh	წ	on	o	ჯ	jan	j
პ	p	რ	j	ჭ	par	p	ჰ	hae	h
ჟ	j (French)	შ	h (mute)	ძ	zhan	j (French)	გ	hoe	hoi
რ	r	ჩ	ho	წ	rac	r	ფ	fa	f
		ც	ch	ბ	san	s	შ	short e	
				ჭ	tar	t			

## PUNCTUATION.

- Hyphen	:	Full stop
∴ End of a Period	∴	Semicolon
,	,	Comma.



## GREEK LIGATURES AND ABBREVIATIONS.

These contractions are peculiar to old editions of Greek works. They are no longer used in modern typography.

αι	αι	ειναι	ου	στι
αν	αν	εχ	ουδε	στο
αλ	αλ	ελ	ουζ	στρ
αλλ	αλλ	ελλ	ουτου	στν
αν	αν	ελαττον	π	στω
απο	απο	εν	παρὰ	συ
αρ	αρ	εξ	πει	σω
ας	ας	επειδη	περ	τ
αυ	αυ	επευ	περι	τα
αυτω	αυτω	επι	πην	ται
αυτω	αυτω	επι	ππ	ταις
β	β	εστι	πρ	ταυτα
γ	γ	ευ	προ	τει
γα	γα	ην	πτ	την
γαρ	γαρ	θ	πν	την
γγ	γγ	θα	πω	της
γγ	γγ	θε	ρα	τι
γε	γε	θει	ρι	το
γει	γει	θη	ρο	το
γελ	γελ	θι	σ	το
γελλ	γελλ	θο	σα	τον
γεν	γεν	θυ	σαυτα	του
γερ	γερ	θω	σε	του
γη	γη	και	σει	του
γι	γι	και	ση	τρο
γινεται	γινεται	και	σην	τε
γν	γν	κατα	σθ	τυ
γο	γο	κατα	σθαι	τω
γορ	γορ	κατα	σχ	τω
γυ	γυ	ζεφάλοιον	σι	των
γω	γω	λλ	σκ	των
δ	δ	ματων	σο	υ
δε	δε	μεν	σο	υι
δευ	δευ	μεν	σπ	υν
δεξ	δεξ	μενος	σπαν	υπ
δια	δια	μετα	σσ	υπο
δια	δια	μετα	στ	χαν
δρ	δρ	μων	στα	χι
ει	ει	οιον	στε	χο
ει	ει	ος	στει	ψι
			στη	



# ROMAIC OR MODERN GREEK.

The Alphabet consists of the following 24 letters, which are the same as in ancient Greek.

A α, B β, Γ γ, Δ δ, E ε, Z ζ, H η, Θ θ, I ι, K κ, Λ λ, M μ, N ν, Ξ ξ, O ο, Π π, P ρ, Σ σ (final ς), T τ, Y υ, Φ φ, X χ, Ψ ψ, Ω ω.

The vowels are α, ε, η, ι, ο, υ and ω.

## PRONUNCIATION.

- A α (*Alpha*) short or long as in *papa*.  
 B β (*Beta*) is represented by *bh* or *v*. In sound it differs slightly from the English *v*, the mouth being somewhat rounded in the articulation of the Romaic letter.  
 Γ γ (*Gamma*) is an aspirate of *g* in *go*. In γγ the first gamma becomes nasal; αγγεῖος, for instance, is pronounced *ang-ye-los*. It receives the same sound before the palatals *χ* and *ζ*, as *αναγγεῖ* (*a-nang-ki*). Before *τ* and *υ* it is like *g* in *gen*. To produce the sound of our *g* in *grey*, the Modern Greeks use *λ* as *λ* *χρῆν* (*Graham*).  
 Δ δ (*Delta*) is aspirated as *th* in *the*.  
 Ε ε (*Epsilon*) as the *e* in *pet*.  
 Ζ ζ (*Zeta*) like *z*. Ζωή (*zo-i*).  
 Θ θ (*Theta*) like *th* in *thick*.  
 Ι ι (*Iota*) like *i* in *machine*. When *ι* is placed under the vowels as in α, η, ω or by the side of capital vowels (Αι, Ηι, Ωι) it is not sounded and only lengthens the principal vowel. This *ι* is known as the *Iota subscriptum*.  
 Κ κ (*Kappa*) like our *k*. It is softened after the nasal γ hence ἀγγεῖα is pronounced *anglin*.  
 Λ λ (*Lambda*) like *l* in *long*. Before *ι* it has the sound of *li* in *William*.  
 Μ μ (*Mi*) like *m*. Placed before *π*, these two letters acquire the sound of *b* *μαρτύρι* (*marooti*). This combination of *μπ* takes the sound of *b* in words received from foreign languages, but in compound Romaic words, each letter retains its original pronunciation. Example *εμπόρεμα* (*em-pee-ree-ma*).  
 Ν ν (*Ni*) is *n*. Placed before *τ*, the two letters coalesce in the sound of *d*, which is articulated somewhat harder than the *δ*. For example *δικαιο* (*di-kan-i*). *ντ* have conjointly the sound of *j*; as *ντῆρα* (*jani*). When the letters *ν* and *τ* form part of two syllables in a compound word, they retain their natural sound of *nt*. For example *εντιμος* (*en-timos*). Before the vowel *ι* the *ν* is articulated like *ni* in *opinion* as *νιπτω* (*nyipto*).  
 Ξ ξ (*Xi*) is *X*.  
 Ο ο (*Omikron*) like *o* in *dot*.  
 Π π (*Pi*) like *p*.  
 Ρ ρ (*Rho*) like *r* in *rod*. If doubled, it has a sharper sound.  
 Σ σ (*Sigma*) like *s* in *so*. Before β, Γ, Δ, Ζ, Α, Μ, Ν, Π and in the proclitics (such as *τους* *τας*) before the same consonants, the Sigma is sounded like *z*, as *Σουφν* (*Zuicni*).  
 Τ τ (*Taph*) is *t*. *τς* sounds sometimes like *ts*, but generally like *ch*, as *τςεπερις* (*chetepis*). Words with *τς* are mostly of foreign origin.  
 Υ υ (*Ypsilon*) like *y* in *Egypt*. For example *τυρῶν* (*tyrion*).  
 Φ φ (*Phi*) like *f* or *ph*.  
 Χ χ (*Khi* or *Chi*) like the German or Scotch *ch*. Before the vowels *α*, *ο*, *υ*, it is more harsh than before *e* and *i*.  
 Ψ ψ (*Psi*) like *ps* in *gipsy*.  
 Ω ω (*Omega*) is the long *o*.

The following are diphthongs αι, αυ, ει, ου, ηυ, οι and ου (u). At diphthongs like *e* in *ethics*. The *υ*

of αυ, ου, ηυ sounds like β before a vowel, or the soft and liquid letters β, γ, δ, ζ, λ, μ, ν, ρ. — οι is like *ee* and ου like *oo* in *good*.

The diæresis over the second vowel of diphthongs restores to each vowel its original sound; αι, αυ, ει, ου are pronounced separately α-ι, α-υ &c.

## BREATHINGS AND PUNCTUATION.

The Romaic or Modern Greek admits like the ancient language two marks over initial vowels, namely the *Smooth breathing* *Spiritus lenis* ('), which is not noticed in reading, and the *Rough breathing* *Spiritus asper* ('), which in classical Greek takes the sound of our *h*, but is not audible in the modern language. The *ρ*, as an initial, is invariably marked with the *rough breathing*. In double *ρ* the first has the *smooth* and the second the *rough breathing*.

The names of the stops are, τελευτα, full stop (.), μισοστιγμα, colon (:), υποστιγμα, or υποδιαστολη, comma (,) and περιανωρον, sign of interrogation (?). The mark of exclamation (!) is rarely used.

To these signs must be added the *apostrophe* and the *diæresis*. The former (') denotes the elision of one or more vowels. E. g. απ' ἐμὴν, ἀπ' ἡμῶν instead of αὐτο etc. This elision of vowels occurs even before consonants as ἀπ' τοῦ instead of αὐτοῦ.

In xāν (instead of xai āν) and xāνενος (instead of xai āν enas) etc, the mark (') denotes the coalescence of vowels (xāνενος) and is called *coronis*. This mark is often used in contractions as μόνον-ψαί τοῦ χάρ.

The diæresis prevents the union of diphthongs. E. g. μετανέτης sounds *bo-y-an-jis*.

Another mark of separation is the *diastole* (.), which resembles the comma, and is used to distinguish the pronoun *ὅ*, *τι* and the adverb *τό*, *τῷ* from the conjunction *ὅτι* and the adverb *τότε*.

## ACCENTS.

The tone is indicated by three accents, namely the *circumflex* (περισπωμένη) or long accent, the *acute* (ὀξυτά) or sharp accent, and the *grave* (βραχέα) or heavy accent in final syllables. Some monosyllabic words, being unaccented, are called *atona*. The *circumflex* can only be placed on the ultimate and penultimate syllable. When the vowel of a final syllable is long, the penultimate vowel cannot take the circumflex. A word is termed *perispomenon*, when it has the circumflex on its last syllable, or if it is a monosyllable and is marked with this accent. When the circumflex occurs over the penult, the word is *properispomenon*.

The *Acute* takes its place in the penultimate and ante-penultimate syllable. Also on the final syllable at the end of a period, or when an enclitic follows (i. e. a word like *μολ*, *μολ*, *μζ* which throws its accent on the antecedent).

When the final syllable is long, the acute cannot revert to the ante-penultimate.

When the acute occurs in a monosyllable or in a final syllable, the word is called *oxytonon*; the penultimate, thus accented, is called *paroxytonon*; and the ante-penultimate with the acute is *proparoxytonon*.

## OLD-SLAVONIC (CYRILLIC).

Based on the most ancient MSS, and cut under the direction of the I. R. Aulic Councillor  
Dr. PAUL JOS. SCHAFARIK at the type-factory of GOTTLIEB HAASE SÖHNE in Prague.

Form	Name	Value	Form	Name	Value
А а	Az	a	Ф ф	Fert	f, ph
Б б	Buky	b	Х х	Chër	kh
В в	Vědi	v	Ѡ ѡ	Ó	ó
Г г	Glagol'	g	Ѣ ѣ	Ot	ot
Д д	Dobro	d	Ц ц	Ci	ts
Е е	Est'	e	У у	Červ'	č
Ж ж	Živěte	ž	Ш ш	Ša	š
З з	Zělo	z	Щ щ	Šta	št, šč
И и	Zemlja	z	Ъ ъ	Jer	—
І і	Iže	i	Ы ы	Jery	y
Ї ї	I	i	Ь ь	Jery	y
К к	I	i, y	Ј ј	Jerek	—
Л л	Kako	k	Ѥ ѥ	Jeť	ě
М м	Ljudi	l	Ю ю	Ju	yu
Н н	Myslite	m	Ѧ ѧ	Ja	ya
О о	Naš	n	Ѩ ѩ	Je	ye
П п	On	o	Ѭ ѭ	Ės	ę
Р р	Pokoj	p	Ѯ ѯ	Aš	ą
С с	Rci (Reci)	r	Ѱ ѱ	Jęs	yę
Т т	Slovo	s	Ѳ ѳ	Jas	yą
Ѧ ѧ	Tverdo	t	Ѵ ѵ	Ksi	x
Ѩ ѩ	Těrv'	t	Ѷ ѷ	Psi	ps
Ѭ ѭ	Uk	u	Ѹ ѹ	Thita	th
Ѯ ѯ	Uk	u	Ѻ ѻ	Ižica	y

NUMERICAL LETTERS.

$\cdot\mathbf{A}\cdot\cdot\mathbf{B}\cdot\cdot\mathbf{C}\cdot\cdot\mathbf{D}\cdot\cdot\mathbf{E}\cdot\cdot$  etc.  $\cdot\mathbf{A1}\cdot\cdot\mathbf{B1}\cdot\cdot\mathbf{C1}\cdot\cdot\mathbf{D1}\cdot\cdot\mathbf{E1}\cdot\cdot$  etc.  $\cdot\mathbf{KA}\cdot\cdot\mathbf{KB}\cdot\cdot\mathbf{KC}\cdot\cdot\mathbf{KD}\cdot\cdot\mathbf{KE}\cdot\cdot$  etc.  
 1 2 3 4 5 11 12 13 14 15 21 22 23 24 25  
 $\mathbf{Z}=\mathbf{S}=6$   $\mathbf{C}=\mathbf{Y}=90$   $\mathbf{F}=1000$ , E. g.  $\cdot\mathbf{ZTCZ}\cdot=6396$ .

ABBREVIATIONS (IN SLAVONIC TITLY).

- Titla (simple).	⦿ Glagol'-Titla.	⦿ Oneček.
⦿ Dobro-Titla.	⦿ Slovo-Titla.	⦿ Pajerek.

NOTES.

1) The power and pronunciation of the accented (Roman) characters are sufficiently explained in the Polish and Czechian Alphabets.

2) The alphabetical names have been rectified and, as regards the nasals, completed according to approved ancient authorities.

3) The characters are designed to be printed without the abbreviations, which as relics of the

middle ages must be restricted to ecclesiastical works. Here they are solely introduced as historical forms. The "Pajerek" is a *Jer* or *Jerek* placed over a letter.

4) As in ancient MSS, the numbers are indicated by the insertion of the letters between two dots. The "Titla" formerly used have thus become unnecessary.

## GLAGOLITIC.

According to ancient MSS (sec. XI—XII) designed by Dr. PAUL JOS. SCHAFARIK, cut at the type-factory of GOTTLIEB HAASE SÖHNE in Prague.

Form	Name	Value		Num: value	Form	Name	Value		Num: value
		Cyrill.	Latin				Cyrill.	Latin	
⳨ ⳨	Az	а	a	1	Ⳛ Ⳛ	Uk	у	u	400
⳩ ⳩	Buky	б	b	2	Ⳙ Ⳙ	Fert	ф	f, ph	500
⳪ ⳪	Vědi	в	v	3	ⳙ ⳙ				
Ⳬ Ⳬ	Glagol'	г	g	4	ⳛ ⳛ	Chër	х	ch	600
ⳬ ⳬ	Dobro	д	d	5	Ⳝ Ⳝ	Ó	о	ó	700
Ⳮ Ⳮ	Est	е	e	6	ⳝ ⳝ	Šta	ш	št	800
ⳮ ⳮ	Živěte	ж	ž	7	Ⳟ Ⳟ	Ci	ц	c	900
⳯ ⳯	Zělo	ѕ	z	8	ⳟ ⳟ	Červ'	ч	č	1000
⳰ ⳰	Zemlja	з	z	9	Ⳡ Ⳡ	Ša	ш	š	
⳱ ⳱	Iže	и	i	10	ⳡ ⳡ	Jer	ѣ	ě	
Ⳳ Ⳳ	I	і	i	20	Ⳣ Ⳣ	Jery	ѣ	y	
ⳳ ⳳ	Děrv' o. Jot	ђ, і	dj, j	30	ⳣ ⳣ	Jerek	ѣ	ě	i
⳴ ⳴					ⳤ ⳤ				
⳵ ⳵	Kako	к	k	40	⳥ ⳥	Jef	ѣ	ě, ja	
⳶ ⳶	Ljudi	л	l	50	⳦ ⳦	Ju	ю	ju	
⳷ ⳷	Myslite	м	m	60	⳧ ⳧	Eš	а	e	
⳸ ⳸					⳨ ⳨	As	а	a	
⳹ ⳹	Naš	н	n	70	⳩ ⳩	Jes	ѣ	jē	
⳺ ⳺	On	о	o	80	⳪ ⳪	Jas	ѣ	ja	
⳻ ⳻	Pokoj	п	p	90	Ⳬ Ⳬ	Thita	ѣ	th	
⳼ ⳼	R'ci	р	r	100	ⳬ ⳬ	Ižica	ѣ	y	
⳽ ⳽	Slovo	с	s	200					
⳾ ⳾	Tvr'do	т	t	300					

## NOTES.

1. The letter *Jery* is a compound of *Jer* and *Iže*.
2. The letters ⳳ—⳴ and Ⳛ—ⳛ are duplicate forms. ⳳ and Ⳛ are peculiar to Bulgarian MSS; ⳴ and ⳛ are Croatian characters. Ⳛ on the other hand is not a real duplicate form of Ⳙ, it being identical with ⳙ, which is used instead of Ⳙ.
3. These characters are arranged to be printed without abbreviations, which are confined to liturgical books.
4. The numerical power of the letters is indicated by dots on both sides, as .⳨. .⳩. etc.
5. Further information on the value and the pronunciation of the accented letters is given in the Czechian and Polish Alphabets.



## CROATO-GLAGOLITIC.

Designed from Croatian MSS and printed works by Dr. PAUL JOS. SCHAFARIK; cut at the type-factory of GOTTLIEB HAASE SÖHNE in Prague.

Form	Name	Value	Num: value	Form	Name	Value	Num: value
Ⲁ Ⲁ	Az	a	1	Ⲕ Ⲕ	Uk	u	400
Ⲃ Ⲃ	Buky	b	2	Ⲇ Ⲇ	Fert	f, ph	500
Ⲅ Ⲅ	Vědi	v	3	Ⲉ Ⲉ	Chěr	kh (ch)	600
Ⲇ Ⲇ	Glagol'	g	4	Ⲋ Ⲋ	Ó	ó	700
Ⲉ Ⲉ	Dobro	d	5	Ⲍ Ⲍ	Šta	št	800
Ⲋ Ⲋ	Est'	e	6	Ⲏ Ⲏ	Ci	ts	900
Ⲍ Ⲍ	Živěte	ž	7	Ⲑ Ⲑ	Červ'	č	1000
Ⲏ Ⲏ	Zělo	z	8	Ⲓ Ⲓ	Ša	š	
Ⲑ Ⲑ	Zemlja	z	9	Ⲕ Ⲕ	Jer	o	
Ⲓ Ⲓ	Iže	i	10	Ⲗ Ⲗ		e	
Ⲕ Ⲕ	I	i	20	Ⲙ Ⲙ	Jery	y	
Ⲗ Ⲗ	{ Děrv' } { ě. Jot }	dy, y	30	Ⲛ Ⲛ			
Ⲙ Ⲙ				Ⲝ Ⲝ	Jerek	e	
Ⲛ Ⲛ	Kako	k	40	Ⲟ Ⲟ		i	
Ⲝ Ⲝ	Ljudi	l	50	Ⲡ Ⲡ	Jet'	ě, ya	
Ⲟ Ⲟ	Myslite	m	60	Ⲣ Ⲣ	Ju	yu	
Ⲡ Ⲡ	Naš	n	70	Ⲥ Ⲥ	Ěs	ę	
Ⲣ Ⲣ	On	o	80	ⲧ ⲧ	As	a	
Ⲥ Ⲥ	Pokoj	p	90	ⲩ ⲩ	Jes	yę	
ⲧ ⲧ	R'ci	r	100	ⲫ ⲫ	Jas	ya	
ⲩ ⲩ	Slovo	s	200	ⲭ ⲭ	Thita	th	
ⲫ ⲫ	Tvr'do	t	300	ⲯ ⲯ	Ižica	y	

## NOTES.

1. These characters are designed to be printed without the abbreviations, peculiar to liturgical works.
2. The numerical letters are distinguished by dots on both sides, as .Ⲁ. .Ⲃ. etc.
3. The punctuation is the same as in other languages.
4. The letters Ⲅ, Ⲇ, Ⲉ and Ⲋ, the forms Ⲏ and Ⲑ, together with the combinations Ⲓ and Ⲕ, are only found in Bulgarian MSS. The ligature Ⲗ instead of Ⲓ only occurs in Croatian MSS.
5. The value and pronunciation of the accented Roman characters may be ascertained by referring to the Czechian and Polish Alphabets.



## RUSSIAN

Form		Name	Value	Observations
Straight	Italic			
А а	<i>А а</i>	As	a	<p>The Russian Alphabet consists of 35 letters. Ecclesiastical and Old-Russian works, being written in the ancient Slavonic character, contain the following additional letters,</p> <p>Ѣ (<i>Selo</i>) s, Ѥ or Ѧ (<i>Ik</i>) u,  Ѧ (<i>Ot</i>) o, ѧ (<i>Yuss</i>) w, Ѩ (<i>O</i>) ó,  ѩ (<i>Ksi</i>) x, Ѫ (<i>Psi</i>) ps.</p> <p>In ecclesiastical books these letters serve as numerals, and are arranged as in Greek. The sign ⚭ is placed over numerical letters.</p> <p>a has the sounds of <i>bar</i> and <i>bat</i>.  б like <i>b</i>. Before the strong consonants and as a final letter it sounds like <i>p</i>.  в 1) At the beginning of a syllable and before <b>л н п</b> like <i>v</i>. 2) As a final, and before a hard consonant, like <i>ff</i>.  г 1) As an initial and medial letter nearly like <i>g</i> in <i>give</i>, but with a hard Hibernian aspiration. 2) As a final, or before <i>sh</i>, like <i>k</i>. 3) In ecclesiastical pronunciation it is aspirated like <i>h</i>. In some words, especially foreign, it sounds like <i>ch</i> in the Scotch <i>loch</i>. 4) The adjectival and pronominal ending <i>ro</i> is commonly pronounced <i>vo</i>, and in inferior style it is even spelled so.  д as our <i>d</i>.  е 1) At the beginning of syllables like <i>yai</i>. 2) At the end of syllables like <i>e</i> in <i>met</i>, with a feeble <i>y</i> before it. After sibilants this <i>y</i> is not heard. 3) When accented it sounds like <i>yeo</i> in <i>yeoman</i>, and after <b>ж ч ш</b> <b>ш н</b> like <i>o</i> in <i>go</i>. This rule is applied a) before a consonant followed by the vowels <i>a, o, y, ы, ѣ</i>; b) at the end of a word; c) in the instrumental case <i>em</i> or <i>en</i> of nouns fem. sing.; d) before <b>г, к, х</b>, and the sibilants <b>ж, ш</b>. e) in the present tense. In improved spelling the sound of <i>yo</i> or <i>o</i> is indicated by <i>ë</i>. This <i>ë</i> also denotes the French sound of <i>eu</i>.  ж like <i>j</i> in the French word <i>jour</i>.  н and <i>i</i> sound alike.</p>
Б б	<i>Б б</i>	Buki	b	
В в	<i>В в</i>	Vyedi	v ff	
Г г	<i>Г г</i>	Glagol	g gh	
Д д	<i>Д д</i>	Dobro	d	
Е е	<i>Е е</i>	Yest	é yé yo o	
Ж ж	<i>Ж ж</i>	Zhivete	zh sh	
З з	<i>З з</i>	Zemla	z	
И и	<i>И и</i>	Izhe	i	
І і	<i>І і</i>	I	i	
К к	<i>К к</i>	Kako	k ek	
Л л	<i>Л л</i>	Lüdi	l	
М м	<i>М м</i>	Muislete	m	
Н н	<i>Н н</i>	Nash	n	
О о	<i>О о</i>	On	o a	
П п	<i>П п</i>	Pokoi	p	
Р р	<i>Р р</i>	Rtsui	r	
С с	<i>С с</i>	Slovo	s	
Т т	<i>Т т</i>	Tverdo	t	
У у	<i>У у</i>	U	u	
Ф ф	<i>Ф ф</i>	Fert	ph f	
Х х	<i>Х х</i>	Kherr	kh (ch in Ger.)	
Ц ц	<i>Ц ц</i>	Tsui	ts	
Ч ч	<i>Ч ч</i>	Tsherv	ch	
Ш ш	<i>Ш ш</i>	Sha	sh	
Щ щ	<i>Щ щ</i>	Shtsha	shch	
Ъ ъ	<i>Ъ ъ</i>	Yerr	hard suffix	
Ы ы	<i>Ы ы</i>	Yerui	ui i thick	
Ь ь	<i>Ь ь</i>	Yer	soft suffix	
Ѣ ѣ	<i>Ѣ ѣ</i>	Yat	yé éyo	
Э э	<i>Э э</i>	E	è	
Ю ю	<i>Ю ю</i>	Yu	yoo Fr.	
Я я	<i>Я я</i>	Ya	ya yè	
Ө ө	<i>Ө ө</i>	Fita	f	
Ѳ ѳ	<i>Ѳ ѳ</i>	Izhitza	y v	



## SERVIAN.

(Modern form, cut by F. RösCH in Leipzig.)

This language is divided into the dialects of the Herzegovina, of Ressava and Syrmia. The Servians use the Slavonic (Cyrillic), the Croats and Wends the Roman characters.

Cyrillic	Latin	Pronunciation
А а	A a	a
Б б	B b	b
В в	V v	v
Г г	G g	g
Д д	D d	d
Ђ ђ	Dj dj	dy, Hungarian gy
Е е	E e	e
Ж ж	Ž ž	j in French
З з	Z z	z
И и	I i	i
І і	I i	y
Ј ј	J j	y
К к	K k	k
Л л	L l	l
Љ љ	Lj lj	ly, Ital. gl, gli
М м	M m	m
Н н	N n	n
Њ њ	Nj nj	n Ital. and Fr. ng
О о	O o	o
П п	P p	p
Р р	R r	r
С с	S s	s
Т т	T t	t
Ђ ђ	Ć ć	ty, tj
У у	U u	u
Ф ф	F f	f
Х х	H h	h
Ц ц	Ć c	ts
Ч ч	Č č	ch
Ш ш	Š š	sh
Щ щ	Šć šć	shch
Ъ ъ	—	hardening suffix
Ы ы	I i	ee, French u
Ь ь	—	softening suffix
Ѣ ѣ	Je je è ie	yé, ié
Є є	Je je	yé
Ю ю	Ju ju	yū
Я я	Ja ja	yā
Ѡ ѡ	Dž dž	j
Ѣ ѣ	Th th	th

## ILLYRIAN.

Nr. I represents the "organic" orthography now used in Roman-Catholic publications; Nrs. II and III are to some extent current in Slavonia, Croatia and Dalmatia.

I.	II.	III.	Pronunciation
a	a	a	The Vowels a, o, u, i, e sound as in German or Italian.
b	b	b	
c	c	cz	
č	ch	ch	ě as a medial, follows all the consonants except gutturals. It rarely is a final letter and never an initial. Its general sound is like ye (in yes). In the dialect of the Herzegovina it has the same pronunciation when not lengthened, otherwise it sounds like ee combined with ye, as is heard in see yet. Before i, like y in ye. In the Syrmian dialect it varies between ay and ee. In the Ressava dialect it almost invariably sounds like ay (in nay). This ě is now often spelled ie.
č	cs	cs	
d	d	d	
dj	dj	dy	
e	e	e	
ě	e i	e i	
f	f	f	
g	g	g	
gj	gj	gy	
h	h	h	
i	i	i	c is like ts in lots. č and tj almost like ts. The difference between these spellings is, that č can be used indiscriminately, and tj only in derived words. ě like j in jar. dj and gj are nearly like j in jar. lj like lli in William. nj like ni in opinion. š like sh.
j	j	j	
k	k	k	
l	l	l	
lj	lj	ly	
m	m	m	
n	n	n	
nj	nj	ny	
o	o	o	
p	p	p	
r	r	r	
s	s	ss sz	
š	sh	sc	
t	t	t	
tj	ch	ty	
u	u	u	
v	v	v	
z	z	z	
ž	x	s	
dž	dx cx	ds	

ž like s in measure.

dž like j in jar.

r has the power both of a consonant and a vowel. As a consonant it sounds as in other languages. As a vowel it forms a separate syllable and is pronounced with a very slight sound of e. The orthography of this syllable varies. Some spell it ěr, the Ragusans ar. Others omit à and è and simply write r, others again write ě.

Accents used in Servian: acute (´); sign of length (˘); ˘ or ˘ sign of brevity.



## WALLACHIAN

Form	Name	Value		Modern Shape		Improved Modern Shape		
Я а	As	a	Besides the Alphabet on the left there are two varieties of characters.  Ѡ (pronounced <i>Eer</i> ) is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.  Ы ( <i>Yory</i> ) is only employed in words of Slavonic origin.  Ѳ <i>Ishitza</i> , occurs in words derived from the Greek. After vowels its sound is <i>v</i> , after consonants <i>i</i> (as in <i>Bit</i> ).	А	a	Antiqua	Current	
Б б	Buke	b		Б	б	А	а	a
В в	Vide	v		В	в	Б	б	b
Г г	Glagol	g		Г	г	В	в	v
Д д	Dobro	d		Д	д	Г	г	g
Е е	Yest	ye e long		Е	е	Д	д	d
Ж ж	Shivete	zh		Ж	ж	Е	е	yé e
З з	Zalo	Nr. 6		З	з	Ж	ж	j (Fr.)
И й ѥ	I	i		И	и	З	з	z
І і Ѣ ѣ	Ishe	y		І	і	И	и	i
К к	Kako	k	SHORT ACCENTS.  Ѧ is placed over an initial vowel and the diphthong <b>ю</b> .  ѧ stands over a medial and final <b>н</b> and over a final <b>ю</b> .  —  LONG ACCENTS.  Ѩ over initial vowels and over <b>ю</b> .  ѩ over medial vowels.  Ѫ over the medial <b>а</b> and the final <b>а, ѣ, ѧ, н</b> .  ѫ over abbreviations and letters employed as numerals.	К	к	К	к	k
Л л	Lüde	l		Л	л	Л	л	l
М м	Meslite	m		М	м	М	м	m
Н н	Nash	n		Н	н	Н	н	n
О о	On	o		О	о	О	о	o
П п	Pokoi	p		П	п	П	п	p
Р р	Rtse	r		Р	р	Р	р	r
С с	Slovo	s		С	с	С	с	s
Т т	Tverdo	t		Т	т	Т	т	t
У у	Uk	u		У	у	У	у	u
Ѧ Ѧ	Uniku	u	Ѧ is placed over an initial vowel and the diphthong <b>ю</b> .  ѧ stands over a medial and final <b>н</b> and over a final <b>ю</b> .  —  LONG ACCENTS.  Ѩ over initial vowels and over <b>ю</b> .  ѩ over medial vowels.  Ѫ over the medial <b>а</b> and the final <b>а, ѣ, ѧ, н</b> .  ѫ over abbreviations and letters employed as numerals.	Ѧ	Ѧ	Ѧ	Ѧ	f
Ф ф	Fert	f ph		Ф	ф	Ф	ф	f
Х х	Khír	kh h		Х	х	Х	х	kh(ch)
Ѧ Ѧ	O	o long		Ѧ	Ѧ	Ѧ	Ѧ	ts
Ц ц	Tsi	ts		Ц	ц	Ц	ц	ch
Ч ч	Cher	ch		Ч	ч	Ч	ч	sh
Ш ш	Sha	sh		Ш	ш	Ш	ш	sht
Щ щ	Shta	sht		Щ	щ	Щ	щ	e
Ъ ѡ	Yor	e short		Ъ	ѡ	Ъ	ѡ	éa
Ѣ ѣ	Yaty	éa		Ѣ	ѣ	Ѣ	ѣ	ya
Ѥ ѥ	Yus	è (uñh)	Ѥ	ѥ	Ѥ	ѥ	(uñh)	
Ю ю	Yu	yu	Ѧ is placed over an initial vowel and the diphthong <b>ю</b> .  ѧ stands over a medial and final <b>н</b> and over a final <b>ю</b> .  —  LONG ACCENTS.  Ѩ over initial vowels and over <b>ю</b> .  ѩ over medial vowels.  Ѫ over the medial <b>а</b> and the final <b>а, ѣ, ѧ, н</b> .  ѫ over abbreviations and letters employed as numerals.	Ю	ю	Ю	ю	üñ
Я я	Yako	ya		Я	я	Я	я	j
Ѧ Ѧ	Ia	ya		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Ftita	ft th		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Psi	ps		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Xi	x		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Ishitza	v i *		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Ůñ	üñg in Germ.		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Je	j		Ѧ	Ѧ	Ѧ	Ѧ	j
Ѧ Ѧ	Je	j		Ѧ	Ѧ	Ѧ	Ѧ	j

The Alphabet to the left is used in liturgical and ancient works. With the improved cultivation of the language the letters have been considerably simplified, as is shown in the two Alphabets at the right. No notice has been taken here of the ancient names and the accentuation of the letters.



## POLISH

a	like a
Ą ą	— ong
e	— e
é	— ié
Ę ę	— eng
i	— i
o	— o
Ó ó	— ou
u	— u
y	— e(ü)
b	— b
ó	— by'
c	— ts
Ć ć	— tssh
cz	— ch
d	— d
dz	— dz
dż	— dzy'
đ	— j
f	— f
g	— g
h	— h(ch)
ch	— kh
j	— y
k	— k
l	— l
Ł ł	— —
m	— m
ń	— my'
n	— n
Ń ń	— ny'
p	— p
ó	— p
r	— r
rz	— rsh
s	— s
Ś ś	— sy'
sz	— sh
t	— t
w	— v
ó	— vy'
z	— z
Ż ż	— zy'
Żż Żż	— j(Fr.)

The marginal column shows the pronunciation of Polish letters in as far as it approximates the English. The vowels *a, e, i, o, ou, u, ü* in the adjoining column are sounded as in German. The following peculiarities must be noticed.

In addition to the five elementary vowels, common to the European languages, occurs *y*, which is deeper than the *i* and sharper than the French mute *e* (in *poudre*, Polish *pułdyr*). As accessory vowels of *a, e* stand the nasals *ą* and *ę* (*ong, eng*). Before *b, p*, they sound *om*, but nasally; *é*, always strongly accented, is an intermediate of *e* and *i*. In *ie, ia, io, in* the *i* merely indicates the softness of the preceding consonant; in fact this *i* forms part of such a consonant. *ó* is a strongly accented deep *o*, nearly like *u*. Hence the Polish vowels descend in the following gradation: *i, é, (ie), e, ę, y, a, ą, o, ó, u*.

These vowels have a clear and distinct sound, except the *i* which obtains the consonantal force of *y*, when it is followed by a vowel and preceded by *b, c, dz, m, n, p, s, w, z*. In this case the *i* is merely the medium of softening the consonant, Ex: *biódro* (loin) sounds *byodro*. Before *e* it becomes *ie*.

The consonants *ł, ć, dż, m, n, p, s, w, z* are attended by a slight and rapid articulation of *y*, as if written *by, cy, dzy, my, ny, py, sy, wy, zy*. They stand as finals of words, and also of syllables followed by consonants. Of these letters *ć* takes the intermediate sound of our *h* and *ch*.

*c* sounds like *ts* in *wants*.

*cz* is our *ch*, and *sz* our *sh*.

*dz* sounds like *ds* in *wands*.

*dż* is like *j* in *jar*.

*h* is of rare occurrence, the Slavonic *h* being represented in Polish by *g*. It is as guttural as the German *ch*, Ex: *hultaj* (a Good for nothing).

*ł* the virgulated *l* is heavier than the common *l*. The middle part of the tongue is more raised in the articulation of this letter.

*rz* is *r* blended with *ż*. The *r* is softly rolled, and its *z* is like the French *j*. Ex: *przy*.

*ż* like *j* in the French word *jour*.

To avoid the accumulation of softening *iota*-marks of the letters *ł, ń, ń, ó, ś, ó, ź*, the following process is preferred. Before a vowel an *i* is inserted (as *bia mia* etc.); before *ż* however and before consonants the *iota*-sign is dispensed with; *ł, ó, ó, ń*, lose this sign even at the end of a word. Owing to the diminution of the characteristic signs, the letters *w, b, p, m, n, s, z* deviate from the original rule and may be followed by either *i* or *y*.

## SORBIAN OR WENDISH OF LUSATIA.

The vowels are: a, o, u, y, e, i. The union of a and o makes ò; o and u form ó; e and i coalesce in è. The semi-consonant j is connected with i; h with e; w with a o u.

The consonants are divided 1) into Labials w, f, v, b, p, m. 2) Palatals and Linguals n, l, r. 3) Dentals d, t, c. 4) Sibilants z, ž, s, š, c, č. 5) Gutturals h, ch (g) k.

With regard to their articulation these consonants are divided into broad and slender sounds, according as they are hardened or softened in their utterance.

Broad sounds: w, w̃, b, b̃, z, ž, d, dz, dž, h, g.

Slender sounds: f, v, p, p̃, s, š, t, c, č, ds, ts, ch, k.

Between these letters nine intermediates take their place: m, m̃, n, ñ, l̃, l, l̃, r, r̃.

The whole Alphabet thus consists of the following 8 vowels and 32 consonants. A (ò) o, ó, u, y, e, è, i; j, w, w̃ (f, v) b, b̃, p, p̃, m, m̃, n, ñ, l, l̃, (l̃'), r, r̃, z, ž, s, š, d, dz, dž, t, c, č, ts, h, ch, g, k.

In combining one consonant or several consonants with a vowel to form a syllable, a distinction is made between hard soft and neutral consonants.

At the same time the following rule is to be observed. In the grammatical combinations of structure, derivation, declension, comparison and conjugation the vowel y cannot follow a soft consonant, nor can e and i follow a hard consonant, whilst the neutral consonants may be succeeded by either y or i. In conformity with this rule are reckoned as

Soft, j w̃ v b̃ p̃ m̃ ñ l̃ r̃ ž š é dž č.

Hard, l̃ r z s d dz t c (h ch g k).

Neutral, w f b p m n ds ts.

The letters qu and x, in words of foreign origin, are spelled kw and ks, as kwadrat, Aleksander, kwas. Also g occurs only in foreign words. V and f are found in but few vernacular terms.

### PRONUNCIATION OF THE CONSONANTS.

The accented characters w̃ b̃ p̃ m̃ ñ r̃ differ from the unaccented in softness of sound. Before e (acute) é and i this accent is unnecessary, because these vowels are sufficient to soften the preceding consonants.

l̃ sounds like v. In the north-eastern part of the country it is pronounced like a harsh l. For instance čólo.

dz as in English, but without a break between the two letters. Example na fidzy.

dž like g in gentle, as džera, nadžya.

z as in English, f. i. zuby.

ž like the s in pleasure, f. i. žolty.

š like sh, f. i. šaty, šéry.

c like ts, as cybać.

č nearly like ch in churn, f. i. černí.

č the sharpest sibilant like tch in wretch, f. i. čorný.

ds, ts like ts, f. i. tsihać.

ch is frequently pronounced hard, like c before a, o, u, especially at the beginning of words, for instance chory.

j like y in yes.

s like z.

w like v.

### PRONUNCIATION OF THE VOWELS.

a i u as the vowels in are, here, true.

e is acute, grave, or long. After c z s it is often pronounced like y.

o acute grave or lengthened.

ó deep nearly like u.

è like ea in dear.

y deep as ea in dearth.

## CZECHIAN OR BOHEMIAN.

Roman.

a b c d e f g h c h i j k l m n o p r s t u v y z — á é í ó ú ý — ů — è

Č č Ď ě Ď' ď Ğ ğ ň Ř ř Š š Ť ť Ů ů Ž ž

German.

a b c d e f g h c h i j k l m n o p r ſ ſ t u v y z — á é í ó ú ý — ů — ě

Č č Ď ě Ď' ď Ů ů ň Ř ř Š ſ š Ť ť Ů ů Ž ž

q and x only occur in foreign words. qu is generally replaced by kv as kvittance (receipt). Some writers use w for v and ou for au.

The accented vowels á é í ú ý and ů are long: without accent their pronunciation is short.

ě í í are termed soft vowels. The others are hard.

h c h k r are hard consonants.

c ě d' j ň ř š ť ž are soft, and

h d f g l m n p s t v z are called indelinite consonants.

## THE FOLLOWING SOUNDS DIFFER FROM THE ENGLISH PRONUNCIATION.

a sounds like the first a in papa.

á like a in father.

e even before k, sounds like ts, as necky (nets-ku) the tray.

č like ch in church.

d before í í or when marked with the liquifying sign (ď) is sounded dy. This consonantal y is softly blended with its d, as div or diw (pronounced dyiv).

e like e in den.

é like a in late.

ě as ye in yet. It can only occur after v, f, b, p, m, n, d, t with which it coalesces. As věk (vyek) a century.

ey like a in late followed by y in yet, as woley (call thou). This final y forms a distinct sound.

g as in garnet. It only occurs in foreign words.

h aspirated at the beginning and in the middle of a word like h in house. At the end of a syllable it partakes of the guttural sound of ch and is somewhat softer than ch in the Scotch loch.

ch like ch in the Scotch word loch, as chleb (bread).

í as in grin.

ī like ee in green.

j like y, as jaro (pr. yaro) springtime.

n before í í, or when marked ň, sounds like ni in opinion.

o as in of.

ó as in door.

ou is a diphthong which blends the sound of o (in pole) with u (in put). These vowels retain their separate pronunciation in verbs with prefixed po, as poubrati (po-u-bra-ti).

š (in German type ſſ, and as a final, š) like sh in fish.

t before í í, or when marked ť, sounds like a t with which the semi-vowel y coalesces, as ťulipan (pron. tyoo-le-pan) tulip.

u as in put.

ů and ů long as in blue.

y like u in the French pure.

z as in English but.

ž like s in measure.

## ORTHOEPIC RULES.

1) The vowels with the long accent (´) should not be lengthened to excess.

2) The consonants s, š, z, ž, become mute before the affix sky, as vesský.

3) The consonant j, as an initial before another consonant, is not pronounced, as jsem. When a syllable ending in a vowel precedes, the j becomes audible.

4) The compounds te ds and ts are pronounced like c; dš and tš, like č.

5) Prepositions consisting of a simple consonant, such as k, s, v, z, although standing by themselves, do not form a syllable, but are sounded together with the first syllable of the next word, for instance k tobě s námi. These unconnected prepositions cannot be placed by themselves at the end of a line or a page.

6) The auxiliary verb. *jsem*, *jsi*, *jest-jsmě*, *jste*, *jsou*, the conjunctive particles *bych*, *bys*, *by*, *bychom*, *byste*, *bý*, and the reflexive pronouns *se*, *si* attached to an active participle, are blended together in the pronunciation and joined by a hyphen. The same is the case when *si*, *se* are postpositions of nouns or adjectives. E. g. *shledání-se*, *modlíci-se*.

7) The soft consonants must be carefully distinguished in articulation from the indefinites, and the *i* *í* *ě* must properly coalesce with the latter.

8) The sibilants *c* *s* *z* differ from each other as well as from *č* *š* *ž*.

9) *h* is never mute. Example *hrom* (thunder) in which the *h* sounds as the *h* in the Scotch pronunciation of which.

10) The accent always rests on the first syllable, as *be-žim*, *pri-nesu*. The accented syllable may at the same time be lengthened, as *sná-žim*, *krá-sa*.

#### DIVISION OF SYLLABLES.

In words which are difficult to pronounce, owing to the complication of consonants, it is of importance

to ascertain the component syllables. In this language most syllables end in vowels. The following circumstances must be noticed in applying this rule.

1) A consonant placed between two vowels or between a vowel and *l* or *r*, joins the next syllable. Example: *stra-ka*, *ba-vl-na*.

2) Of several consonants, followed by a vowel, only the last consonant goes to the next syllable; yet *sk*, *šk*, *st*, *št* are not separated but join the next syllable. In such instances the preceding syllable is often without a vowel, while *l* or *r* forms the medial consonant. Example, *hrn-číř*.

3) *l*, *r*, *ř*, with a vowel after, are joined by the preceding consonant in forming one syllable. To this rule *n* forms an exception. The consonants *sk*, *šk*, *st*, *št* must without separation be annexed to the syllable which follows. Example, *kno-flík*, *zei-dlík*, *svě-tlo*, *han-li-vý*.

4) Compound words are divided according to their component parts, as *ou-voz*, *ná-dvo-ří*.

## HUNGARIAN.

The Hungarian language comprises 31 sonants which are expressed by the Roman Alphabet. Owing to the combinations of some letters the Alphabet is formed as follows:

a b cs cz d e f g gy h i j k l ly m n ny o ô p r s sz  
t ty u ü v z zs.

The vowels *a e i o ô u ü*, are sounded as in German. With the accent at the top the vowels *á é í ó ö ú ü* are lengthened.

The combinations *cs cz gy ly ny sz ty zs* represent single articulations and are inseparable in spelling.

*cs* sounds like *ch* as *kocsi*.

*cz* » » *ts* as *czukor*.

*gy* » » *di* in the French word *Dieu*, as *gyár*.

*ly* » » *il* in the French word *email*, as *homály*.

*ny* » » *ni* in *opinion*, as *anya*.

*sz* » » *s* as *ság*.

*ty* » » *ti* in the French *metier* as *tyúk*.

*zs* » » *j* in the French word *jour* as *zsák*.

With regard to the consonants is to be noticed that,

*j* is pronounced like *y* in *yes*, and

*s* like the English *sh*, as *sas*.

The letters *c ch q w x* are only found in foreign words, for instance *Cato*, *Achilles*.

*y* does not represent an independent sound, but simply helps to soften the antecedent letter. Nevertheless in Old-Hungarian words *y* and *ch* are employed as independent letters. The former then sounds like *i* in *it*, and *ch* as in *church*. For example *Pálffy*, *Forgach*.

The compounds *cs* and *cz* are often denoted by *ts* and *tz*. Modern Orthography rejects this spelling except in words where the *t* is radical, as *barátság* (not *barácság*).



## LETTISH.

The Lets have adopted the following 22 letters of the German Alphabet,

a b c d e g h i j k l m n o p r s t u w z.

The c and h are only used in combination with s to express the sounds of šč and šch. The h moreover serves to lengthen the vowels. The German consonants b d f v never occur in Lettish. Nor are ö and ü in use. The g x y are represented by gw, fs, i.

By means of the 22 characters the following 34 simple sounds of the Lettish language are formed.

a b bj d c g g G j i k k K l l L m mj u n N o p pj r r R  
s šš šch f S (s) šch t tšch u w wj z.

### PRONUNCIATION OF THE SIMPLE VOWELS.

a c i u are short. When lengthened they are marked thus,

â ê î û

The o is always long, nevertheless it receives the lengthening mark to distinguish the accented oh and ô from the lighter e.

### PRONUNCIATION OF THE DIPHTHONGS.

There are six diphthongs in this language, ai au ei ei ui ee. The first five are pronounced as in German. Although ai and ei are naturally long they occur with the circumflex ai ei. The diphthong ei only appears in the word wei. When au and ui are to become separate syllables the u and i are marked with the diæresis, aü, uî. Peculiar is the sound of ee; it passes from the articulation of ee (such as is heard in the German word See or in the English word say) to an intermediate sound, such as is heard in the second a of advantage.

### CONSONANTS.

The following letters have the English sound, b d f m n p r t. The j is a consonant like our y; w sounds as v, and z like ts. The labials b m p w may be followed by the modifying j, which like the Russian ѣ, helps to soften the consonant and causes a slight i to ring after it. It cannot be separated from the consonant nor uttered as an independent letter. f n r are virgulated as f n r, instead of being followed by j. Besides these letters the following four are virgulated.

g like the German k before e and i; g is like k before a o u.

k hard like k in king, k as c in come, cut.

š, sharp like our s. š is the final of this sharp š.

š is soft like our z.

šj form an inseparable sound like the soft Italian z.

šj sharp like the Russian ш and the English sh. The virgula of š and šj does not indicate the sound of an inherent j. It only helps to distinguish the sharply pronounced consonant from the soft š and šj, the latter is pronounced like the Russian ж or the French j in jour.

tšj is like the English ch and šj like g in gentle.

### PRONUNCIATION OF SUCCESSIVE CONSONANTS.

Two or more Consonants, joined together in one syllable or in two syllables, must be so articulated that each should retain its original and independent sound. The u is somewhat modified by the g and f. It being assimilated with these letters, its sound is like that in the English words sing, sink (not as in tingle, tinkle). When g and f are marked with the cross-stroke the u is likewise virgulated, and is then pronounced in accordance with the foregoing rules.

## GERMAN

A a	U u	a	N n	N n	n	Ä ä	Ä ä	ä
B b	B b	b	O o	O o	o	Ö ö	Ö ö	ö
C c	C c	c	P p	P p	p	U ü	U ü	ü
D d	D d	d	Q q	Q q	q	ch	ch	ch
E e	E e	e	R r	R r	r	ck	ck	ck
F f	F f	f	S s	S s	s	ff	ff	ff
G g	G g	g	T t	T t	t	fi	fi	fi
H h	H h	h	U u	U u	u	fl	fl	fl
I i	I i	i	V v	V v	v	si	si	si
J j	J j	j	W w	W w	w	ss	ss	ss
K k	K k	k	X x	X x	x	st	st	st
L l	L l	l	Y y	Y y	y	sz	sz	sz
M m	M m	m	Z z	Z z	z	tz	tz	tz

The vowels are: a ä e i o ö u ü. The diphthongs or compound vowels are: ai ei au äu eu; all other letters are consonants.

## Simple vowels.

Every vowel, followed by two consonants, is short, if followed by only one consonant it is long.

A a is pronounced like *a* in the English word *father*.

Ä ä is pronounced like *a* in the English word *late*.

E e is pronounced like *e* in the English word *let*.

I i is pronounced like *i* in the English word *me*.

O o is pronounced like *o* in the English word *hope*.

Ö ö is pronounced like *eu* in the French word *seul*.

U u is pronounced like *oo* in the English word *roof*.

Ü ü is pronounced like the French *u*. There is no corresponding sound in the English language.

Y y has the sound of the German *i*, by which it is generally replaced.

## Double vowels.

The double vowels *aa*, *ee*, *oo*, are no diphthongs, because only one letter is sounded, and the second serves to indicate that the syllable is long.

It is pronounced like *ea* in the English word *meat*.

## Diphthongs.

In the German diphthongs, the two vowels must be sounded one after the other, but so quickly as to form only one syllable.

ai and ei are pronounced almost alike, and have the sound of the English *i* in the word *fire*.

au is pronounced like *ou* in the English word *house*.

äu and eu sound almost like *oy* in the word *joy*.

## Consonants.

The pronunciation of the consonants differs but little in the two languages; the learner should notice the following peculiarities.

C c before ä e and i is pronounced like *ts*.

Before a *u*, before a consonant, and at the end of a syllable it is pronounced like *k*, by which in most cases it may be replaced.

Ch at the beginning of a word is pronounced like *k*, except in words derived from the French, in which it retains the French pronunciation.

In the middle or at the end of a word *ch* has a pronunciation quite peculiar to the German language, and more or less guttural, but for which no corresponding sound can be found in English; it is like the Scotch *ch* in the word *loch* after a *u* or *au*, but softer after ä e i ö ü *äu* *eu*, and after a consonant.

ck or ckj is pronounced like *x* when these consonants belong to the root or radical syllable.

But the *ch* preserves its guttural pronunciation, when it stands before the *s* or *j* by contraction or in a compound word.

G g at the beginning of a syllable is pronounced like the English *g* in the word *good*; but between two vowels, in the middle of a word and at the end of a syllable it has a sound like the *ch*, only much softened.

After *u* at the end of a word it is pronounced like a very soft *k*.

H h is always aspirated at the beginning of a syllable. The aspiration becomes however almost imperceptible before a final *c*.

After a vowel or a *t*, the *h* is not pronounced, but, only indicates that the syllable is long.

J j only stands at the beginning of a syllable and is pronounced like the English *y* in the word *yet*. *ck* replaces the double *f*, and is pronounced short.

Qu qu has the sound of *kw* in English.

S s at the beginning of a syllable is pronounced like the English *s*, at the end of a syllable however like the English *x*.

The long *ss* is placed at the beginning and in the middle, *s* only at the end of syllables. If in an uninflected word there are two *s* one after another, they are written *ss*.

*ß* is only placed at the end or in the middle of syllables, has the sound of the English *ss*.

sch sh is pronounced like the English *sh*.

st and sp are pronounced like *st* and *sp* in English; but in some parts of Germany they pronounce *st* at the beginning of a word like *sh*, and *sp* like *shp*.

v has the sound of *f*.

w is pronounced like the English *r*.

z is sounded like *ts*.

tz replaces the double *z* and is pronounced very hard.

# DANISH

A	a
Å	aa
B	b
C	c
D	d
E	e
F	f
G	g
H	h (haa)
I	i
J	j (Jod)
K	k (kaa)
L	l
M	m
N	n
O	o
P	p
Q	q
R	r
S	s
T	t
U	u
V	v (we)
X	x
Y	y
Z	z
Æ	æ (ä)
Ö	ö (ö)

The Danish language forms part of the great Gothic family and derives its origin from the ancient Norse which once extended over the whole of Scandinavia. Hence it is closely connected with modern Icelandic and Swedish, more distantly with the German, Dutch and English languages. In its further development it has embodied a variety of terms from the French, Latin and Greek.

The Alphabet consists of the adjoining 28 characters.

## VOWELS AND DIPHTHONGS.

The simple vowels are

a aa e i o u y æ ø

They are long as in *Stat* (the *a* as in *star*) *Raad*, *Veen*, *blid*, or short as in *Stad*, *And*, *ved*, *Bid*. The vowels *e i o u y ø* have an open sound as in *Plet*, *Digt*, *gødt*, or a close sound as in *stred*, *strib*, *god*. *e i u*, as long middle vowels, are doubled unless the word ends in *f d g v*, as *Steen*, *Veen*, *Muus*. At the end only the *e* is doubled, as *see*, *fee*. The other vowels at the end of a syllable are always long, as *Taa*, *Eti*, *Mo*, and often add a mute *e*, as *staae*. In inflections the reduplication of the vowel ceases, as *Suus*, *Suse*. The vowels *æ ø* cannot be spelled *ae ee*. *y* is pronounced like the French *u*, not like the English *y*. Ex: *Jude*. *aa* mostly sounds like *a* in *warm*. In modern times *å* has been adopted for *aa*, and *ø* for the open *ø*. For the deep pronunciation of this vowel, the mark *ø* has been retained.

As diphthongs are reckoned *ai ei oi øi aj au eu ui*. Some grammarians only admit the following six, *ai au ei eu vi*. The pronunciation of these vowels consists in a rapid blending of their respective sounds.

## CONSONANTS.

The consonants are

b c d f g h j k l m n p q r s t v x z.

According to the organs of speech they are divisible into: 1) Linguals *b t l n r*. 2) Labials *p v f m*. 3) Palatals *g k j*. 4) Sibilants *s z*. 5) Aspirate *h*. In the dialect of the Juts the *h* is aspirated before *j* and *v*. *b d g* and *v* are softened to such a degree as to become frequently inaudible.

After a vowel or when placed between two vowels *b* is pronounced *bh* (like the Anglo-Saxon *ð* or the English *th* in *smooth*). Double *b* has a similar pronunciation. *fb* and *nb* sound like *ll* and *mm*. In *rb* the *b* has a very soft sound. Also before *s* the *b* loses part of its force, and it becomes inaudible before *t*. *j* sounds like *y* in *yes*. *v* sounds like the English *r*.

The following letters are peculiar to foreign words. 1) *c* before *a o u* or a consonant, is pronounced as in English; before *e i y æ ø*, it is like *s*. *ch* is like *k*. 2) *q*, followed by *v*, sounds like *kv*. 3) *z* is like *dz* or *tz*, and sometimes like the English *z*. 4) *x* in the middle and at the end of a word is like *gs* or *ks*. As an initial it is almost as soft as *z*.

Combinations of letters, *ff fl ll ff fl ft*.



## SWEDISH.

The Alphabet consists of the following 28 letters,

A a B b C c D d E e F f G g H h I i J j K k L l M m N n O o  
P p Q q R r S s T t U u V v X x Y y Z z Å å Ä ä Ö ö.

### PRONUNCIATION OF THE VOWELS.

The vowels *a o u ä* are hard, and *e i y ä ö* are soft. The vowels *a i u* sound as in German or Italian. *ä* is like *a* in *bare*. *ä* like *o* in *tone*. The *e* sounds as *a* in *ale*. 1) when forming an independent syllable, Ex: *e-rig* (eternal). 2) at the end of a syllable, Ex: *ande* (spirit). 3) In many monosyllabic words, inflections, derivations and compounds. *e* sounds like *ai* in *air*. 1) before *f g l m n r*, when the next syllable of the same word is a consonant, as *efter* (after). 2) before *j* as *nej* (no). 3) in many monosyllables, as *elg* (elk). These rules have many exceptions. *o* has two sounds, 1) nearly as in *more*, when it constitutes a syllable by itself, or at the end of a word; also before the radical *m*, in nouns and adjectives; in all derivatives of words ending in *o*; before *x* and in various other forms of words. 2) *o* has a lengthened sound before a final *f*, and a sharp sound (as in *not*) before *m n p r t*. — *ö* is mostly lengthened (nearly like the French *eu* in *leur*) as *dö* (to die), or the sound is sharper and quicker, as *för* (for).

There are no diphthongs in this language.

### CONSONANTS.

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>b</i> retains its ordinary sound.</p> <p><i>c</i> before <i>k</i> stands for <i>kk</i>. Before <i>h</i> it only occurs in the Swedish word <i>Och</i> (pronounced <i>ock</i>). Before the soft vowels it sounds like <i>s</i>, before the hard vowels like <i>k</i>.</p> <p><i>d</i> sounds like our <i>d</i>. Before <i>t</i> like <i>t</i>. As a final after <i>n</i> almost like <i>n</i>. Before <i>j</i> it is silent.</p> <p><i>f</i> as in English. At the end of a word like <i>v</i>. In the middle of a word before <i>v</i> of the same syllable, also after <i>l</i> and <i>r</i>, it is mute Ex: <i>kalfven</i> (pron. <i>kalven</i>). <i>f</i> and <i>v</i> of separate syllables retain their original sounds. Ex: <i>drifved</i> (= <i>driv-ved</i>).</p> <p><i>g</i> 1) as in <i>good</i> before a hard vowel, before <i>i</i> and <i>e</i> in a sharp unaccented syllable, at the end, and before a consonant of the same syllable. 2) like <i>y</i> in <i>yes</i>, before the soft vowels, and after <i>l</i> and <i>r</i>. Ex: <i>ge</i> (like <i>ya</i>). Of this rule there are some exceptions. 3) like <i>ck</i> when a <i>t</i> follows. Ex: <i>sagt</i> (= <i>sackt</i>). 4) like <i>ng</i> when a syllable ends in <i>gn</i>, as <i>vagn</i> (pronounced <i>vagn</i>). 5) before <i>j</i> it is mute. Ex: <i>gjort</i> (pr. <i>jort</i>).</p> <p><i>h</i> is aspirated, before <i>j</i> and <i>v</i> it is mute.</p> | <p><i>j</i> like <i>y</i> in <i>yes</i>. After <i>f m n p</i> the <i>j</i> is clearly articulated and the preceding consonant has a very slight pronunciation. As a final letter it is somewhat like the German <i>ch</i>.</p> <p><i>k</i> 1) as in English. It is subject to the same rules as <i>g</i>. 2) before the soft vowels it is like our <i>ch</i>. In <i>kjortel</i> the <i>k</i> sounds like <i>t</i>.</p> <p><i>l</i> before <i>j</i> is mute.</p> <p><i>m</i> as in English. The final <i>m</i> sounds like two <i>m</i> in those radical words which, on being inflected, are spelled with double <i>m</i>. Ex: <i>lam</i> (pron. <i>lamm</i>).</p> <p><i>q</i> with <i>v</i> after, sounds like <i>kr</i>.</p> <p><i>r</i> and <i>s</i> as in English. <i>stj</i>, <i>sj</i>, <i>skj</i> like <i>sh</i>. <i>sk</i> before soft vowels is likewise pronounced as <i>sh</i>.</p> <p><i>t</i> as in English. <i>tj</i> like <i>ch</i> in <i>church</i>. <i>tion</i>, with a hard vowel before it, like <i>schone</i>, and after a consonant like <i>shone</i>.</p> <p><i>v</i> as in English. The word <i>ron</i> is pronounced <i>fon</i> as in German from which language it is borrowed.</p> <p><i>x</i> is like <i>ks</i>.</p> <p><i>z</i> is pronounced like <i>s</i>.</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## ANGLO-SAXON.

The Anglo-Saxon language developed itself from the Low-German (Old-Saxon) idiom, which was introduced in England by the Saxons in or before the fifth century. In the ninth century this language was cultivated in writing, and obtained currency through the agency of laws and translations. In the eleventh century, with the overthrow of the Saxon dynasty and the commencement of the Norman rule, French became the language of the court and of judicial proceedings. The knowledge of the Anglo-Saxon language was confined to the dependent classes and to the residents of convents. In the thirteenth century, when this idiom once more became popular, it had received such an amount of foreign elements, and had lost so many native characteristics, that it could only be considered as a mixed dialect, out of which the modern English language was gradually formed.

### PRONUNCIATION.

A	a	a
B	b	b
C	c	c
D	d	d
E	e	e
F	f	f
G	g	g
H	h	h
I	i	i
K	k	k
L	l	l
M	m	m
N	n	n
O	o	o
P	p	p
R	r	r
S	s	s
T	t	t
U	u	u
V	v	v
X	x	x
Y	y	y
Z	z	z
Ð	ð	dh
Þ	þ	th

a e i o u have the same sound as in German or Italian.

y has the same force as in English.

æ sounds as a in that.

The Consonants have the following peculiarities of pronunciation,

c is in all instances hard like k. cw stands for kw.

f between two vowels or as a final letter is pronounced like v.

g is always like the modern g in go. Occasionally ȝ occurs instead of g. This letter takes the sound of y in yes.

cg is used instead of gg.

h is a strong aspirate. As a final of a syllable and before a consonant it resembles the German ch.

hw answers to the English wh. h is also found before the liquids l, n, r.

w sometimes precedes r and l.

þ (tha) hard, like th in thick.

ð (eth) soft, like th in this. Usually þ is the initial and ð the final of a syllable.

ȝ and ƿ stands for and.

ƿ stands for pæt.

ƿ stands for oððe.

The accent (˘) over a vowel denotes its length. In words of equal spelling this accent points out the difference of sound and meaning. For instance ac (but, eke) æc (oak). The elision of m and n is indicated by a short line (-) over the antecedent letter.

## IRISH.

It has been a subject of learned discussions whether the Irish in the Pagan period made use of the ancient alphabets, which are known by the name of *Ogham*, and are preserved in some sculptured monuments and in various MSS. With the introduction of Christianity and the spreading of conventual education the subjoined Alphabet was formed, which is still employed in antiquarian publications and in some works intended for the Irish people. At the present time the Irish language is frequently written and printed in Roman (English) characters.

Q	a	a	2	ij	m
B	b	b	N	ij	n
C	c	c k	O	o	o
D	d	d	P	p	p
E	e	e	R	r	r
F	f	f	S	s	s
G	g	g	T	t	t
I	i	i	U	u	u
L	l	l	h	h	h

### LIGATURES.

Irish MSS. contain contractions of which the following are the most usual.

ř	chd	ġ	gh
ad	adh	ġo, ġs	i
ae	e	lj	ll
air	air	mjb	m
an	an	mpe	m
am	am	ij	w
agur	agur	jo	n
ar	ar	ř	nn
v w	v w	p	f
v w	v w	pp	b
b	b	rr	rr
cc	g	ř	h
ch	ch	ř	si
d	d	ř	h
d	d	tr	t
ea	ea	cc	d
ea	ea	ř	i
h	h	řo	i
g	g	ře	ie
		řs	i

## GOTHIC

Form	Value	Num: power	Ligatures and marks	Observations		
ⱦ	a	1	LIGATURES of frequent oc- currence in the Skeireins.  𐍂 for ht 𐍂 — 𐍂𐍃 𐍆 — 𐍆𐍇 𐍇 — 𐍇𐍈 𐍉 — 𐍉𐍊 𐍊 — 𐍊𐍋 𐍋 — 𐍋𐍌 𐍌 — 𐍌𐍍 𐍍 — 𐍍𐍎	The Gothic language was in ancient times spoken by the eastern Germans who were designated by the collective name of Goths. It belongs to the Indo-Germanic family, and as a dead language, it has been remarkably preserved in the most ancient relic of Germanic literature. It is the first of the sister-languages that was committed to writing, and has thus reached us in its original purity. Although the relics of Gothic literature are very scanty, for beyond the fragmentary version of the Bible and the so called <i>Skeireins</i> , we possess but insignificant remains, there is enough matter extant to afford a perfect insight into the grammatical structure of the language.		
Ⱨ	b	2				
ⱨ	g	3				
Ⱪ	d	4				
ⱪ	e	5				
ⱬ	q	6				
Ɑ	z	7				
Ɱ	h	8				
Ɐ	dh (þ)	9	𐍊 — 𐍊𐍋	The Gothic Alphabet has the adjoining 25 letters. Their names are not known, as the language was not cultivated by native grammarians. The invention of the Gothic characters is attributed to Ulphilas.		
Ɒ	i	10	𐍋 — 𐍋𐍌			
ⱱ	k	20	𐍌 — 𐍌𐍍			
Ⱳ	l	30	𐍍 — 𐍍𐍎			
ⱳ	m	40	𐍎 — 𐍎𐍏			
ⱴ	n	50	𐍏 — 𐍏𐍐			
Ⱶ	j	60	𐍐 — 𐍐𐍑			
ⱶ	u	70	𐍑 — 𐍑𐍒			
ⱷ	p	80	for matþaius	To distinguish the numerical letters from the other characters, the sign — or 𐍂 is placed above or below the number. In these cases the diæresis over the ï is omitted. Such letters receive a characteristic dot on the right and left. In the Neapolitan copy two dots, in the shape of a colon, are placed on both sides of the letter. Instead of dots the upright circumflex is 𐍌 sometimes to be found,  𐍌 (2), 𐍌 (40), 𐍌 (60).		
ⱸ	r	100				
ⱹ	s	200	for markus.		The "catchword" is likewise enclosed between upright circumflexes, as 𐍌.	
ⱺ	t	300				
ⱻ	v	400	NUMERICAL FIGURES.			ORTHOGRAPHICAL SIGNS.  1. Diacritical signs only occur in the diæresis over the initial ï.
ⱼ	f	500				
ⱽ	x	600	𐍑 = 90			
Ɀ	w	700	𐍒 = 900			
⳵	o	800				

2. Punctuation. As a general rule the single stop represents the brief pause, and the double stop a longer pause. Yet this punctuation is not consistently carried out, such signs being often introduced without purpose, and contrary to the sense. After a long pause a blank space is left. In the other parts of the text the words are all strung together without division, and sometimes the new sentence is placed in an other line, in which case the initial letters are preceded by the sign 𐍂 or 𐍃.

3. The division of a word, written in two lines, is often made without any rule, and merely to fill the vacant space. The separation is in rare instances indicated by a hyphen, which then is marked at the beginning of the new line, and not at the end of the preceding one.

4. Quotations are distinguished from the text by the single upright mark 𐍌 or the double 𐍌. This mark is continued in the margin before all the lines which contain the quotation. In the Skeireins, which has single marks of quotation, the sign 𐍌 is superadded in the first line, and the sign 𐍌 in the last.

5. Abbreviations. The elision of *n* is marked by 𐍎 or 𐍆, and *m* by 𐍇 or 𐍈. These signs are generally used at the end of a line, when there is not enough space for the letters, but sometimes they also occur in the middle of a line. Real abbreviations are in some instances indicated by the sign 𐍉 before and after the word, but generally the signs 𐍌, 𐍆 or 𐍈 are employed.

# RUNES

Form	Name	Value	Num: power	Observations
ƿ	Fé	f	1	<p>The adoption of the Norse Runes takes its origin in remote antiquity, and probably belongs to a pre-Christian period, as is suggested by a variety of coincidences, although hitherto no positive proofs have been discovered in the Runic stones, by which those monuments might be connected with the prevalence of paganism. As is the case in the Greek, Gothic and other alphabets, the Runic signs represent both letters and numerals. These characters, 16 in number, bear peculiar names, and appear to have been arranged in an arbitrary manner, no attention having been paid to the mutual relation and transition of the several letters.</p> <p>The Runic characters were divided into three classes, in which the letter ƿ headed the first series, * and ↑ each of the other two series. These three divisions were therefore respectively named <i>Frey's-aett</i> (Frey's family), <i>Hagls-aett</i> and <i>Tyrs-aett</i>. It is obvious that these letters could but imperfectly express the variety of sounds. There was only one sign for <i>g</i> and <i>k</i>, <i>d</i> and <i>t</i>, <i>b</i> and <i>p</i>, <i>u</i> <i>v</i> and <i>y</i>. It is most curious that the connective <i>e</i> and <i>ö</i> are omitted in this system. The latter vowel is replaced by <i>au</i>, and the former by <i>i</i>, <i>a</i>, <i>ia</i> and <i>ai</i>. Instead of <i>g</i> and <i>gh</i> the <i>h</i> is occasionally employed, while <i>u</i> might serve as the substitute of <i>o</i>, of the vowel <i>y</i>, of the diphthongs <i>ae</i>, <i>au</i> and <i>ey</i>, and even of the consonants <i>v</i> and <i>f</i>. <i>Yr</i> was equivalent to final <i>r</i> (of the same value as <i>or</i></p>
ᚋ	Ur	u	2	
ᚖ	Thurs	th	3	
ᚔ	Os	o	4	
᚛	Reid	r	5	
ᚠ	Kaun	k	6	
*	Hagl	h	7	
ᚨ	Naud	n	8	
ᚱ	Is	i	9	
ᚲ	Ar	a	10	
ᚷ	Sol	s	11	
ᚹ	Tyr	t	12	
ᚺ	Biörk	b	13	
ᚻ	Laugr	l	14	
ᚾ	Madr	m	15	
ᚿ	Yr	y	16	

and *ur*), and as such it was called *aur*. When the insufficiency of the Runic alphabet was more sensibly felt, four additional letters were adopted, namely *e*, *g*, *p* and *v*. Their names were no longer in conformity with the 16 archaic characters. Nor were new shapes given to these Runes. The simple expedient of adding one dot or two to the kindred letter was considered sufficient; therefore these sign bear the name of *stungnar runir* (dotted runes). The old letters adapted to this purpose are *i*, *k*, *b* and *f*. When the Roman characters, along with the use of paper and parchment were adopted in the North, the Runes were increased by the addition of *dh*, *d*, *ae*, *oe*, *ue*, and subsequently by the superfluous letters *c*, *g*, *x* and *z*. The latter signs may be regarded as spurious augmentations of the Runes. The same criticism seems to hold good in reference to the three double runes, by which the numerals were increased to nineteen, and beyond which the numeral system of the Runes does not extend.

The 3 double-runers are,

ᚱ al, Arlaugr. 17.

* mm, Tvimadr. 18.

Φ tt, Belgthor. 19.

To express the subsequent numbers, several Runes were combined.

ᚱᚱ (= twice ten) denoted 20. ᚱᚠ = 21. ᚱᚋ = 22 and so on.

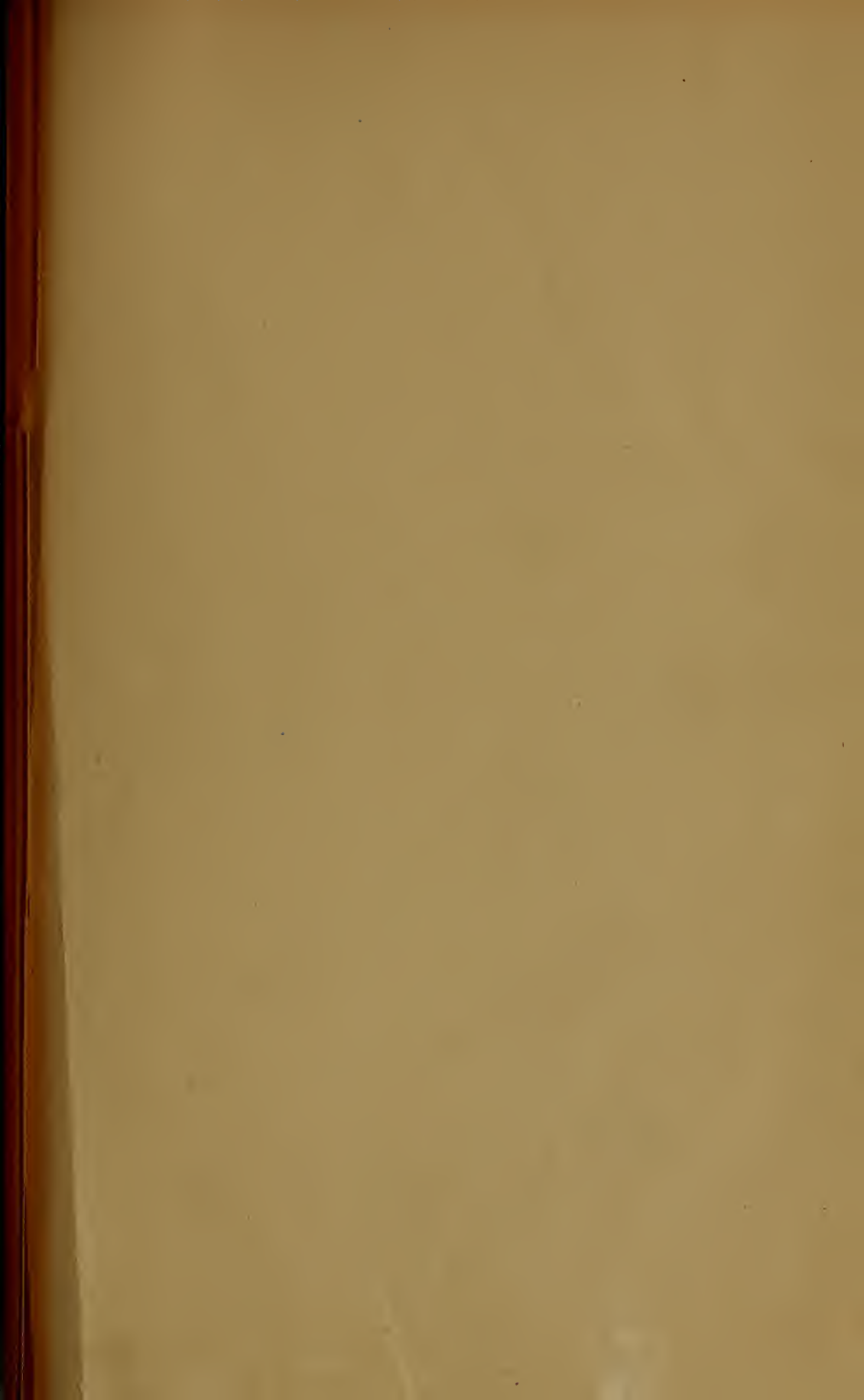


## RUNES

compared with the Gothic Alphabet of Ulfilas.

Northern Runes			Golden Bracteates	Golden Horn		Anglo-Saxon			Alphabet of Ulfilas		
ƿ	fé	f	ƿ			ƿ	feoh	f	ƿ	faihu	φ
ᚋ	úr	u v	ᚋ			ᚋ ᚗ	ur	u	ᚋ	urus	ου ο
ᚢ	Þurs Þorn	Þ ð	ᚢ			ᚢ	Þorn	Þ	ϥ	Þaurnus	ϥ
ᚦ	ós	o	ᚦ	ᚦ	a	ᚦ	os	o	ᚦ	ans	α
ᚱ	reið	r	ᚱ	ᚱ	r	ᚱ	rad	r	ᚱ	raiða	ρ
ᚦ	kaun	k g	<	<	c (k)	ᚦ ᚦ ᚦ	cen	c (k)	ᚱ	kaunzama	k c (γ x)
			X	X	g	X	gyfu	g	ᚱ	giba	γ
			ᚱ	ᚱ	v	ᚱ	wen	w	γ ᚱ	vinja	v u
* ᚦ ᚦ	hagal	h	ᚦ ᚦ ᚦ	ᚦ ᚦ ᚦ	h	ᚦ ᚦ ᚦ	hægl	h	ᚦ	hagls	h
ᚦ ᚦ	nauð	n	ᚦ ᚦ	ᚦ ᚦ	n	ᚦ	nyd	n	ᚦ	náuþs	ν
ᚦ	is	i	ᚦ	ᚦ	i	ᚦ	is	i	ᚦ	eis	ι (η υ ε ει)
ᚦ ᚦ	år	a	ᚦ			ϥ ϥ	ger	ge (-y)	ᚦ	jër	ι
(ᚦ)	(ÿr)		ᚦ			ᚦ ᚦ	eoh	eo	z z	iuja	ξ (σ)
			ᚦ			ᚦ	peorð	p	π	pairþr	π
			ᚦ			ᚦ	eolhx				
ᚦ	sól	s	ᚦ	ᚦ	s	ᚦ	sigel	s	s ᚦ ᚦ	sójl	σ (ξ)
ᚦ ᚦ	týr	t d	ᚦ ᚦ	ᚦ ᚦ	t	ᚦ	tir	t	ᚦ	tius	τ
ᚦ	biarkan	b p	ᚦ			ᚦ	beorce	b	ᚦ ᚦ	baírka	β (v)
			ᚦ	ᚦ	e	ᚦ	eh	e	ᚦ (~)	aihvus	η (ε α ι α ε)
Υ ϥ	maðr	m	ᚦ	ᚦ	m	ᚦ ᚦ	man	m	ᚦ	manna	μ
ᚦ	lögr	l	ᚦ	ᚦ	l	ᚦ	lagu	l	ᚦ	lagus	λ
			ᚦ	ᚦ	gg (ng)	ᚦ	ing	ng	X ᚦ	iggvs	χ (k)
			ᚦ	ᚦ	d	ᚦ	dæg	d	ᚦ	dags	ð (ð)
			(ᚦ)	ᚦ	o	ᚦ	eðel	é æ	ᚦ	ðpal	ω (ο ου)
						ᚦ	ac	à			
						ᚦ	æsc	æ			
						ᚦ	yr	y			
						ᚦ	ear	ea			
						*	ior	io			
						ᚦ ᚦ	calc				
						ᚦ ᚦ	stan	st			
						ᚦ ᚦ	gar	g			









LIBRARY OF CONGRESS



0 003 202 389 7